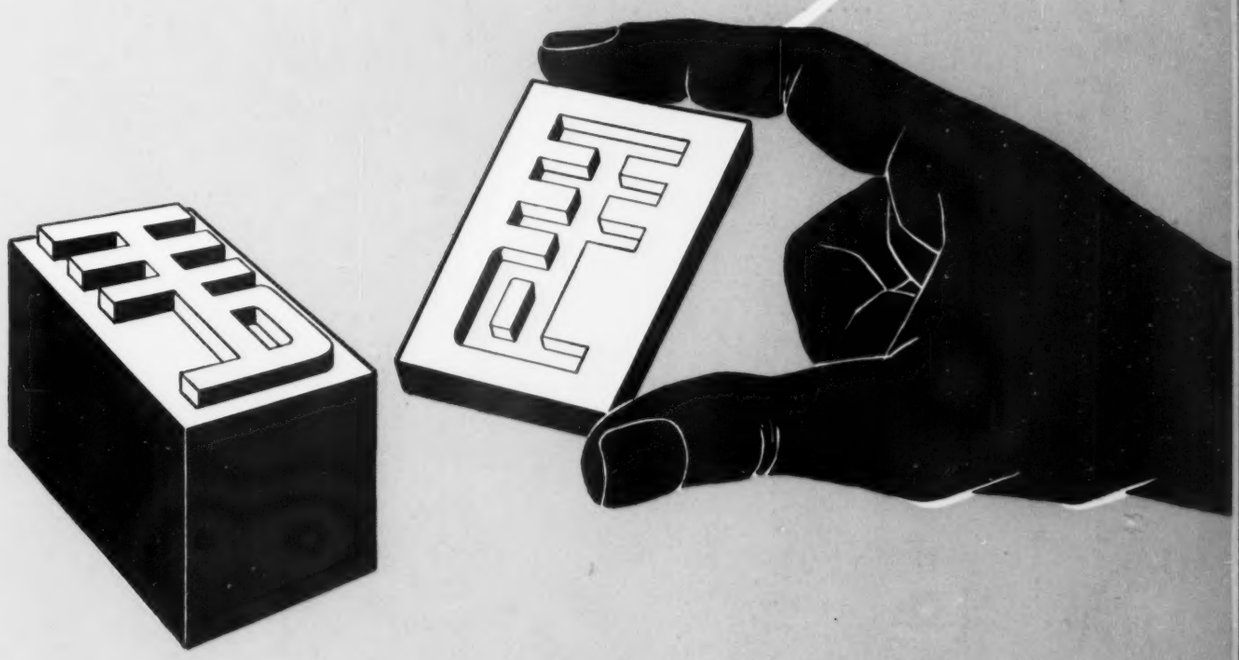
MARCH 1952

PLEASE ROUTE THIS COPY TO	
Manager	Pressroom Foreman
Production Mgr.	Bindery Foreman
Plant Supt.	Mailing Foreman
Platemaking Foreman	Maintenance Supt.
Composing Foreman	Purchasing Agt.
For filing, please return to	

PRINTING EQUIPMENT *Engineer*

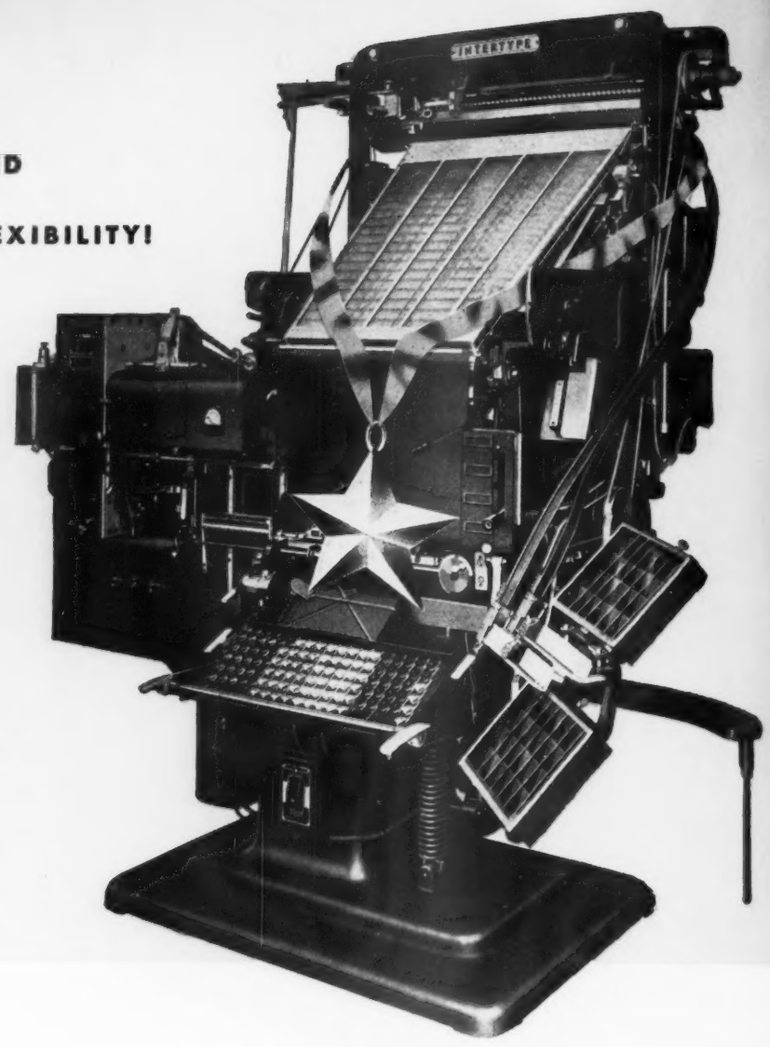


AN INDUSTRY-WIDE TECHNICAL PUBLICATION

HERE'S UNMATCHED

FOTOSETTER FLEXIBILITY!

32 full fonts... without a magazine change



On the four-magazine Fotosetter photographic line composing machine, the operator has four full fonts *and* eight different sizes of type at his fingertips. He simply turns the lens turret dial to the type size he wishes and moves the magazine power-shift lever to the desired face. Result? 32 full fonts without a magazine change. *There's no need to tie up unnecessary capital in a matrix library.*

Each Fotosetter magazine has *117 channels* . . . contains all the basic characters of a font — lower case, caps, small caps, figures, spaces, points, etc. Flexibility of Fotosetter composition is further increased by the availability of *any number of pi characters,* for example: ℅, ⅛, ⅓, ⅙, $\frac{5}{16}$, @, ℔, *, †, ‡, #, ●, ☆, ⁎, /.

What's more, the Fotosetter machine is a mixer, too. Fotomats from any two adjacent magazines can be mixed in the same line at a flip of the mixer lever . . . and distribution is automatic.

NEW HORIZONS booklet graphically explains unmatched Fotosetter flexibility and many other typesetting benefits. Write for your copy.

Intertype Corporation

Brooklyn 2
Chicago 10
San Francisco 11
Los Angeles 15
New Orleans 10
Boston 10

For photographic composition, too, look to Progressive Intertype

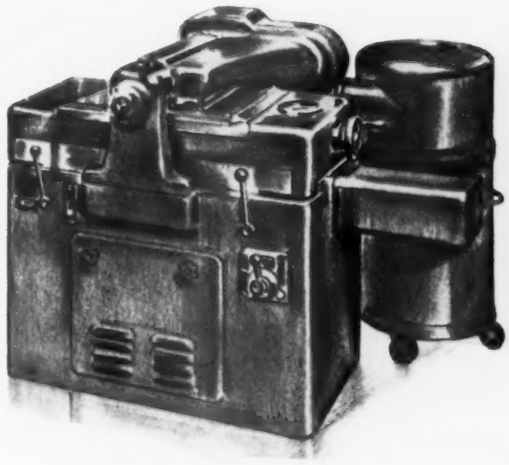
FOTOSETTER, FOTOFONT, FOTOMAT and VISILITE are registered trademarks.

Fotoset in Garamond and Futura

beauty is more than "skin-deep" in the Premier Rotary Shaver

Praise for the Premier invariably evokes such expressions as: "It's a beauty!" . . . "A beautiful piece of machinery!" And with its gleaming custom-auto finish and sleek design, the Premier **is** mighty pleasing to the eye . . . But its real beauty lies in its flawless construction, the result of painstaking craftsmanship, that makes possible precision performance and product rarely equalled in graphic arts equipment.

STA-HI PREMIER ROTARY SHAVER

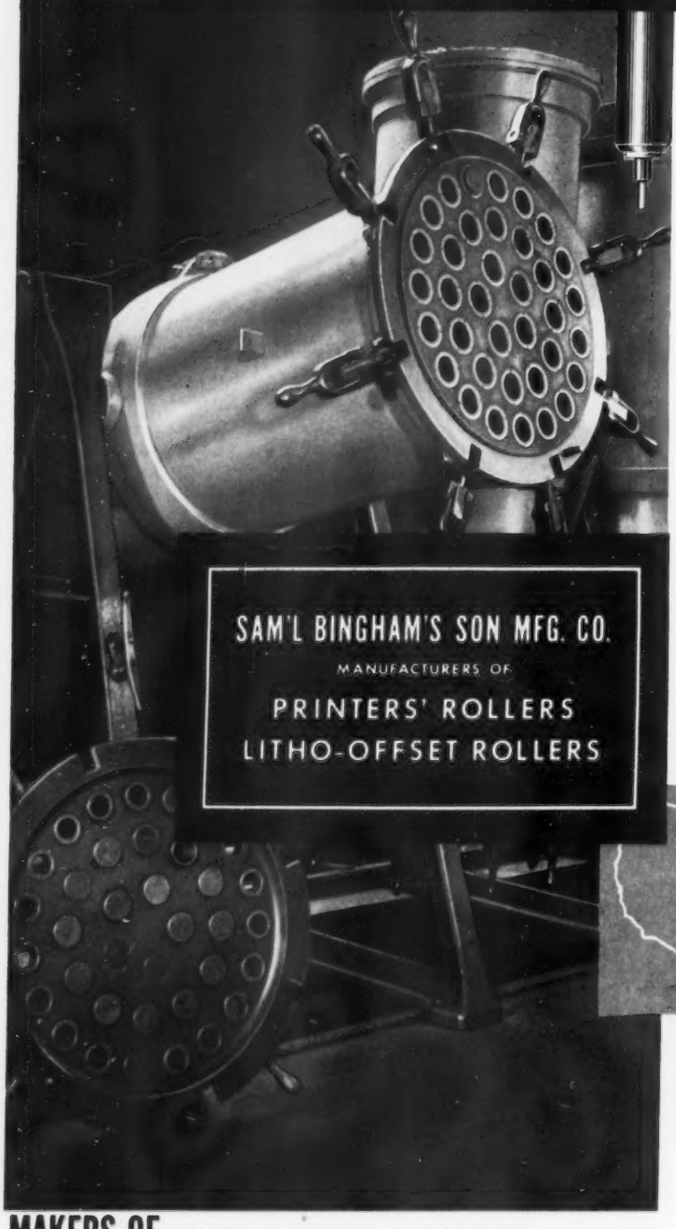


Please bear with us if you must wait for a while for delivery after you place your order for a Premier . . . Because, like ancient Rome, a Premier is not built in a day. It takes many man-hours of precise machining and assembly to produce a Premier so that it will give you years and years of trouble-free flat plate shaving . . . and make you proud of the finer printing results it makes possible in newspaper or commercial plant.

STA-HI CORPORATION 235 West Washington Boulevard, Box 152, Whittier, California

leadership
is our
heritage

SAM'L BINGHAM'S SON MFG. CO.



daily serves printers in 31 states

With 19 modern factories making rollers for use today on today's presses . . .

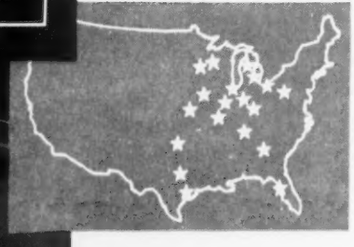
And over 5 generations of top-flight service to the printing industry . . .

Our reward is the faith of thousands of American printers who swear by Sam'l Bingham's Son Mfg. Co. rollers and our ability to deliver "The Right Roller—Right Away!"

IT'S NOW TIME TO GET YOUR COMPOSITION ROLLERS READY FOR

SUMMER USE

SHIP YOUR OLD ROLLERS TO THE FACTORY MOST CONVENIENT TO YOU



Let us serve you too! There's a factory near you.

Atlanta
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Cleveland
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Des Moines
Detroit
Houston
Indianapolis
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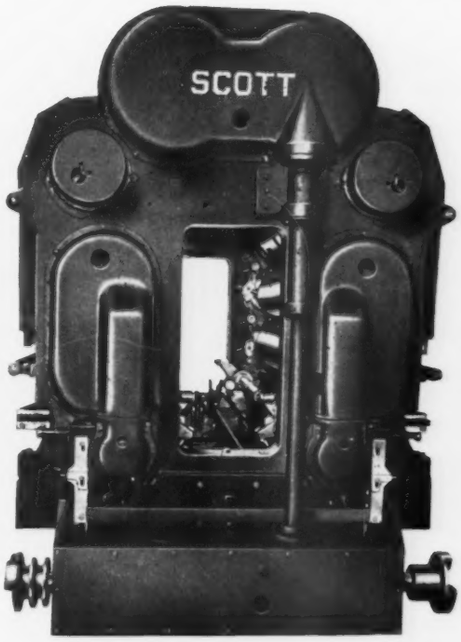
Minneapolis
Nashville
Oklahoma City
Pittsburgh
St. Louis
St. Paul
Springfield, O.
Tampa, Fla.

MAKERS OF RUBBER • NON-MELTABLE • FABRIC-COVERED • ROTOGRAVURE • OFFSET • COMPOSITION • VARNISH-LACQUER • GRAINING **ROLLERS**

The SCOTT UNIT



THE SCOTT UNIT is the fastest, best-built Unit in the world. Because of its special design the bearings are closer to the cylinders, giving a much more rigid impression at speed when going over the plate gaps.

THE DRIVE SHAFT is not located in front of the opening in the Unit and there is free access at both sides of the Unit. See these Units and compare their compactness and accessibility.

THE STREAM-LINING is not carried to excess at the expense of accessibility. It can be used with interchangeable fountains for color, if desired.

See our ads for different features, or write us.

Buy with Confidence . . . BUY SCOTT

WALTER SCOTT & CO., INC.

PLAINFIELD, N. J.

STRONG

Grafarc

Fully Automatic • High Intensity

ARC LAMPS

For all Photo-Mechanical Reproduction Processes

IN YOUR PLATE MAKING DEPARTMENT

Cut exposure time in half. Assure sharper dots. Eliminate dot undercutting by crossover of reflected light rays.

IN YOUR CAMERA GALLERY

Provide uniform illumination on work of any size. Extreme steadiness of light volume—constant color temperatures. Eliminate the illumination variable in accurate control of densities. Have the power to punch through dense Kodachromes.

ON STEP AND REPEAT MACHINES

With precise control of intensity, accurate repeats become routine.

* * *

Approximately twice the light per arc watt results from the use of a silvered glass reflector, instead of a metal reflector. Adapters to fit most cameras and photo-composing machines. Present line supply wiring is usually adequate.

The
STRONG
ELECTRIC CORPORATION
307 CITY PARK AVE., TOLEDO 2, OHIO

Please send free literature and prices.

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Firm _____

Street _____

City _____

State _____

PRINTING EQUIPMENT *Engineer*

AN INDUSTRY-WIDE TECHNICAL PUBLICATION

Published especially for management, production and mechanical executives responsible for printing production and the specification of equipment and supplies used in the commercial, magazine, private plant and daily newspaper fields.

Volume 82 **Number 6**

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EDITORIAL STAFF

MacD. SINCLAIR, Editor

ADAM HENRY REISER
Associate Editor

EDWARD H. OWEN
Assistant Editor

BUSINESS STAFF

DON WILL, Publisher

William L. Osborn, Eastern Manager, 1712 Grand Central Terminal, New York 17, N. Y. Phone: MUrray Hill 6-5980.

Malburn O. Simmons, Mid-West Manager, 333 North Michigan Ave., Chicago 11, Ill. Phone: DEarborn 2-6467.

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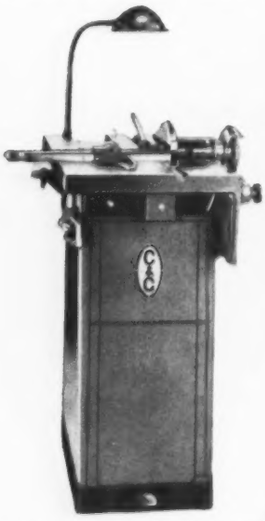
FOR COMPOSING ROOM $AVING$

LOOK into the advantages of
MORRISON *Saw Trimmer and Allied Machines*

MORRISON PLATE BEVELER

Puts a perfect, burr-free shoulder or bevel on all plates. Cutters work from edge of plate, not the top.

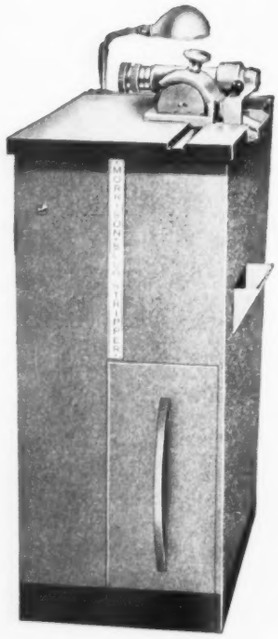
MORRISON
Model 3-A Saw Trimmer



Today's more versatile saw. Clamps the work **behind gauge** for improved visibility, easier handling, and greater accuracy. A must for economy-minded composing rooms.

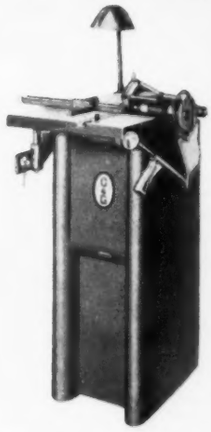
MORRISON

Slug Stripper



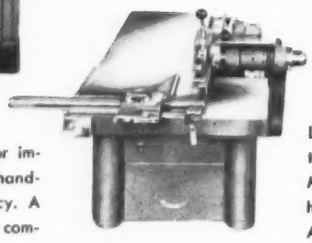
Use this ONE day in your plant and you'll never be without it . . . you'll find it a great time-saver for simple, fast corrections on zincs, electros or shell stereotypes or for use on float lines. No mortising of base necessary—just strip the face of slug line or type character to electrotype, zinc or whatever thickness desired. Holds any slug from one point to 72 points in thickness, and from single character to 30 picas in length.

MORRISON MODEL 45 SAW TRIMMER



Pistol grip saw blade attachment offers "Trigger Speed" saw adjustment, and many other valuable time-saving features.

MORRISON ROUTER AND TYPE HIGH PLANER



MORRISON MODEL "45" SPECIAL

Low cost, embodies many features of Model "45" and Model 3-A Saw Trimmer "Behind the Gauge" work clamp. Also in cabinet model.

Saves correction and make ready time by having all cuts precision height. Has exclusive Morrison micrometer height gauge.

Other Morrison Equipment includes: Strip material cabinets, waste receptacles, Universal saw blades, router bits, and jig saw blades

Symbol of Operating Economy

THE MORRISON COMPANY MILWAUKEE WIS.

THE *Morrison* COMPANY

PRECISION MACHINES FOR THE GRAPHIC ARTS INDUSTRY

125 W. Melvina Street, Milwaukee 12, Wisconsin

Ludlow

introduces a new italic member to the versatile Radiant typeface family

Medium

Medium Italic

Bold

Completion of Ludlow Radiant Bold Condensed Italic further extends the usefulness of this justly popular typeface. The newest addition makes available *seven* distinctive members of this typeface family, the others already introduced being Radiant Medium, Radiant Medium Italic, Radiant Bold, Radiant Bold Condensed, Radiant Bold Extra Condensed and Radiant Heavy.

Radiant is just as sparkling and brilliant as its name indicates, and represents an original Ludlow contribution to American typeface design. It is modern in every stroke and curve, and combines legibility

. . . Radiant Bold Condensed Italic

Heavy

Bold Condensed

Bold Extra Condensed

of color contrast with the simplicity of open sans serif design. It is highly readable, and its use marks any advertising or printed piece as most distinctive.

Each Radiant typeface has its own individuality, and imparts the freshness and novelty that add attractiveness and power to your advertising. Because of its remarkable versatility, Radiant continually gains favor with particular typographers and buyers of printing.

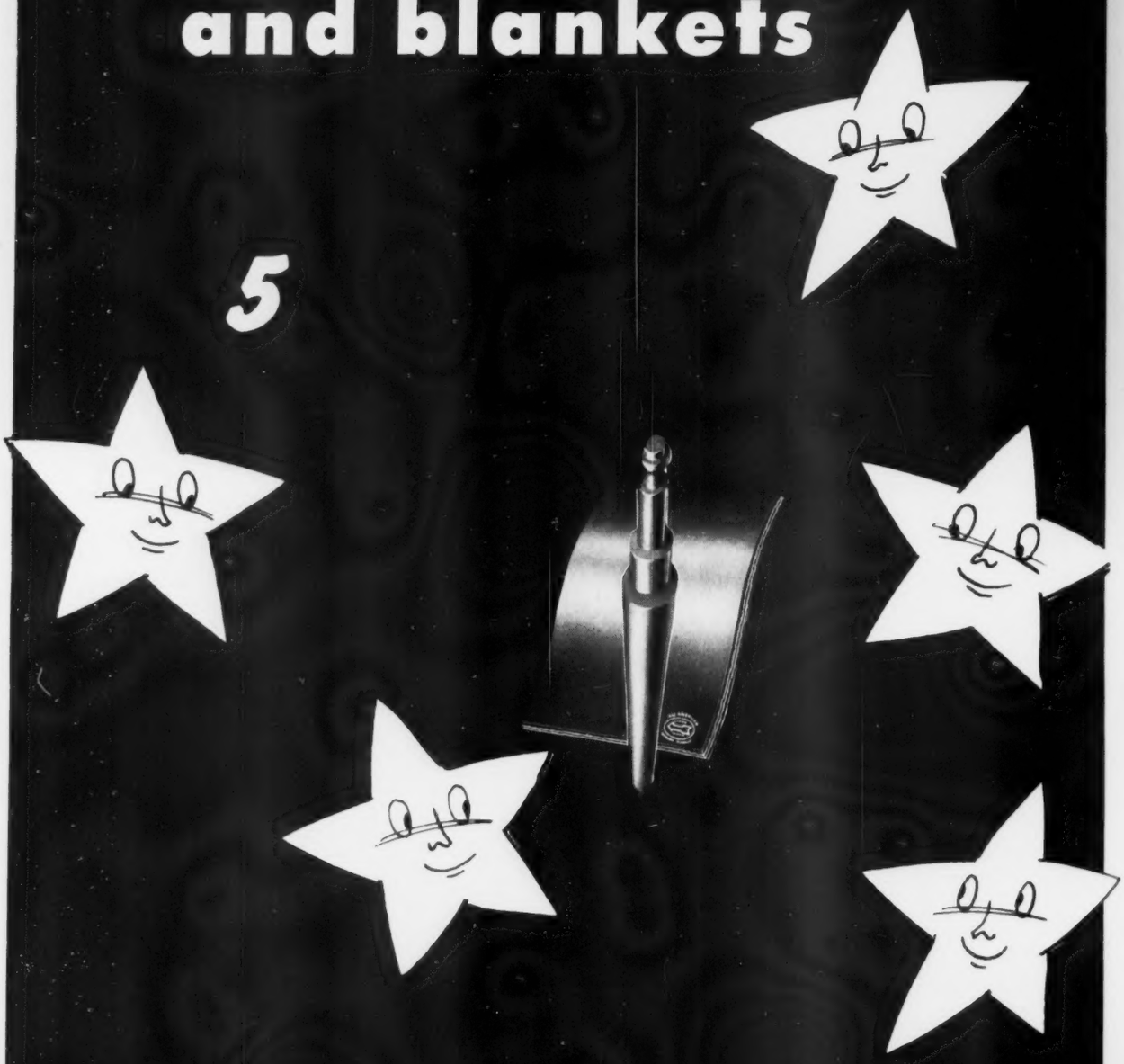
Look into the possibilities of this vitally new and most useful typeface family. Specimen showings of any Radiant typeface gladly sent upon request.

Ludlow Typograph Company · · 2032 Clybourn Avenue, Chicago 14, Illinois

Set in members of the Ludlow Radiant family

mercury rollers and blankets

5



RAPID ROLLER CO.

FEDERAL AT 26TH
CHICAGO 16, ILL.

D. M. RAPPORT
PRESIDENT

PAYS OFF

ONION SKIN
COATED
GUMMED
4-PLY
ENVELOPES
BOND
POSTCARDS

That gives you an idea of the *versatility* of the ATF Little Giant 6, the 12 x 18 automatic job cylinder press made by the manufacturer of the famous Kelly.

It's versatile *another* way, too—the Little Giant 6 handles both long runs and short runs profitably.

Performance like this makes the Little Giant 6 the ideal press for the job shop . . . also a useful auxiliary press in a large commercial shop.

More Profits from More Work in Less Time

Ask the ATF representative about the profit opportunities offered you in the ATF Little Giant 6.

Get all 6 Big Features with the ATF Little Giant 6

Faster get-away

More impressions per hour

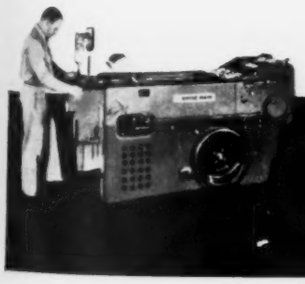
Better quality

Easier operation

Wider range

Bigger printing profits

AMERICAN TYPE FOUNDERS
200 ELMORA AVENUE • ELIZABETH B, NEW JERSEY
Branches in principal cities.



Type faces shown are Spartan Extra Black, Spartan Black, Bodoni Book, Bodoni Bold, Alternate Gothic

ATF

How to put your competition in the shade

Print on a Mann press and you've turned out a job that can't be beat.

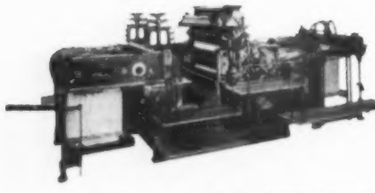
Here's offset printing at its best—printing that gets—and keeps—the business you want.

For all Mann presses have exceptional features, many of them exclusive, that assure unrivalled printing quality and register, economical operation, and top production. They are built for durability, easy accessibility, smooth running and ease of handling. Mann presses are designed to print to exact image length.

The Mann line includes seven one-color, six two-color, and the only sheet-fed offset perfector press available in this country. ATF provides expert maintenance and service.

Check your ATF representative which Mann press you could own most profitably. AMERICAN TYPE FOUNDERS, 200 Elmora Avenue, Elizabeth B, New Jersey.

Type face shown is Bodoni



ATF

BETTER, MORE PROFITABLE PRINTING FROM THE WIDEST LINE OF PROCESSES

GRAVURE . . . LETTERPRESS . . . OFFSET

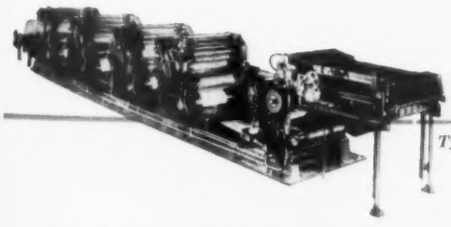
A press of this button

starts your profits rolling in

Switch on a high-speed, web-fed ATF-Webendorfer offset press and turn out production jobs in a hurry.

Webendorfer web presses can be designed to handle your largest, most complex multicolor printing—or your simplest. Cost is low, too. Four classes of web presses cover every type of work—publication, form work, web multicolor and specialty printing. Also, with separate units your Webendorfer web press easily folds, numbers, perforates, sheets, rewinds.

No matter what your offset production problem, your answer is in an ATF-Webendorfer. Contact ATF for the full story. AMERICAN TYPE FOUNDERS, *Webendorfer Division*, 2 South Street, Mt. Vernon, New York.



Type faces shown are: Century Schoolbook, Spartan Extra Black, Spartan Heavy and Spartan Heavy Italic.

ATF

BETTER, MORE PROFITABLE PRINTING FROM THE WIDEST LINE OF PROCESSES

GRAVURE . . . LETTERPRESS . . . OFFSET

AMERICA'S LEADING NEWSPAPERS ARE PRINTED ON GOSS PRESSES

THE DAILY OKLAHOMAN AND TIMES GET 12 HEADLINER UNITS

The Daily Oklahoman and Oklahoma City Times have expanded facilities to serve their 2 billion dollar market. Culminating this farsighted program was the installation of new Goss press equipment, including 12 Headliner units . . . two pairs of Uni-Flow folders . . . and 6 extra color cylinders.

The advantages inherent in this equipment—high sustained speed . . . full range color flexibility . . . Tension Plate Lock-Up . . . Continuous Ink Feed System . . . and fingertip Colortrol—are apparent to readers of *The Daily Oklahoman* and *Times* in more and later news . . . more color . . . better printing . . . neater folding. Ask for further details on this and other prominent Goss installations.

THE GOSS PRINTING PRESS COMPANY
1535 S. Paulina St., Chicago 8, Ill.
Goss Printing Press Co. Ltd., Preston, England

it's **GOSS** *again*

How TIMKEN® bearings make headlines at the Chicago Tribune

SHOWN below are a few of the Chicago Tribune's Goss high speed "Headliner" presses which help "The World's Greatest Newspaper" print and fold nearly a million papers daily.

To make the high speed and precision of the "Headliners" possible and to help them stand up under the tough service day after day, Goss Engineers have used Timken® tapered roller bearings in the following applications: plate and impression cylinders, intermediate drives, folder cylinders, folder drives and inking arrangement.

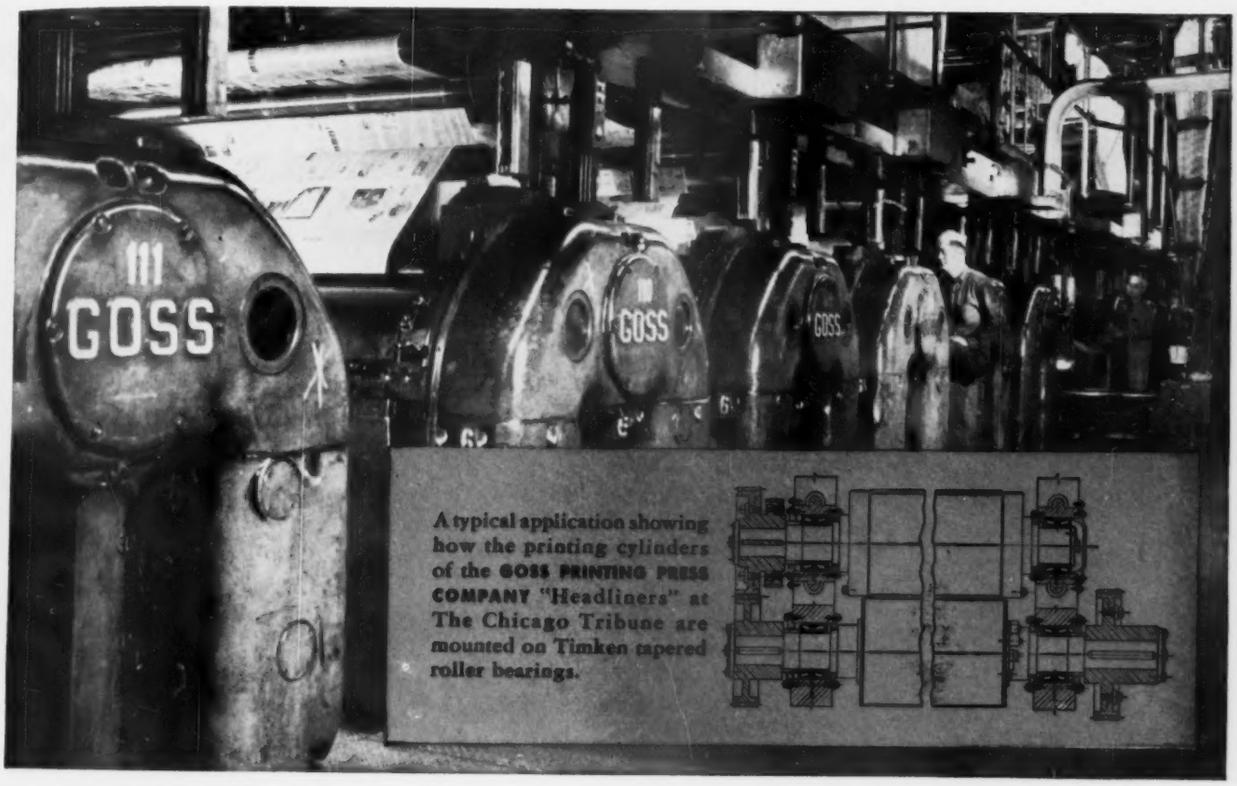
Timken bearings in these applications absorb all end thrust and definitely locate cylinders and gears in fixed running positions.

Due to their tapered construction, Timken bearings carry both radial and thrust loads in any combination. Cylinder play is prevented, stagger marks along with cylinder vibration are eliminated. Long-lasting precision is assured.

With Timken bearings, costly and time-consuming delays for maintenance and lubrication are prevented. And Timken bearings eliminate all speed restrictions due to bearings. Their true rolling motion and smooth surface finish practically eliminate friction. Line contact between rollers and races provides extra load-carrying capacity.

Specify Timken bearings for the machines you build or buy. Look for the trade-mark "Timken" on every bearing. The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

This symbol on a product means its bearings are the best.



A typical application showing how the printing cylinders of the **GOSS PRINTING PRESS COMPANY** "Headliners" at The Chicago Tribune are mounted on Timken tapered roller bearings.

FINISHED TO CLOSER TOLERANCES

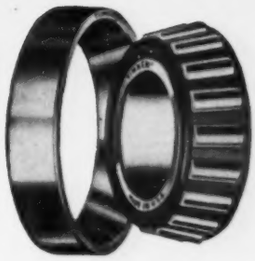
Finishing to incredible smoothness accounts for much of the precise, smooth rolling performance of Timken bearings. This honing operation is typical of the amazingly accurate manufacturing methods at the Timken Company.

The Timken Company is the acknowledged leader in: 1. advanced design; 2. precision manufacturing; 3. rigid quality control; 4. special analysis steels.

TIMKEN

TRADE-MARK REG. U. S. PAT. OFF.

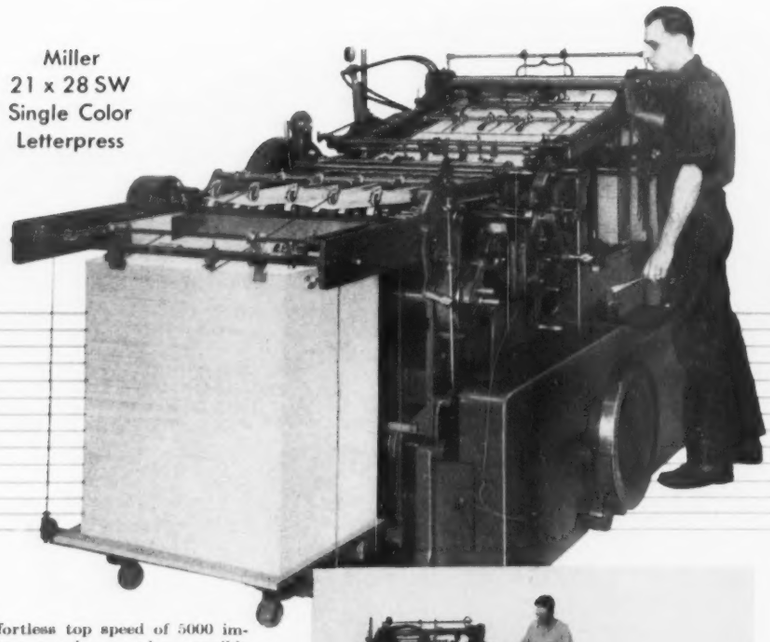
TAPERED ROLLER BEARINGS



NOT JUST A BALL ○ NOT JUST A ROLLER ▭ THE TIMKEN TAPERED ROLLER ▭ BEARING TAKES RADIAL ◫ AND THRUST →◫← LOADS OR ANY COMBINATION →✳←

Small in physical size
Great in printing capacity

Miller
21 x 28 SW
Single Color
Letterpress



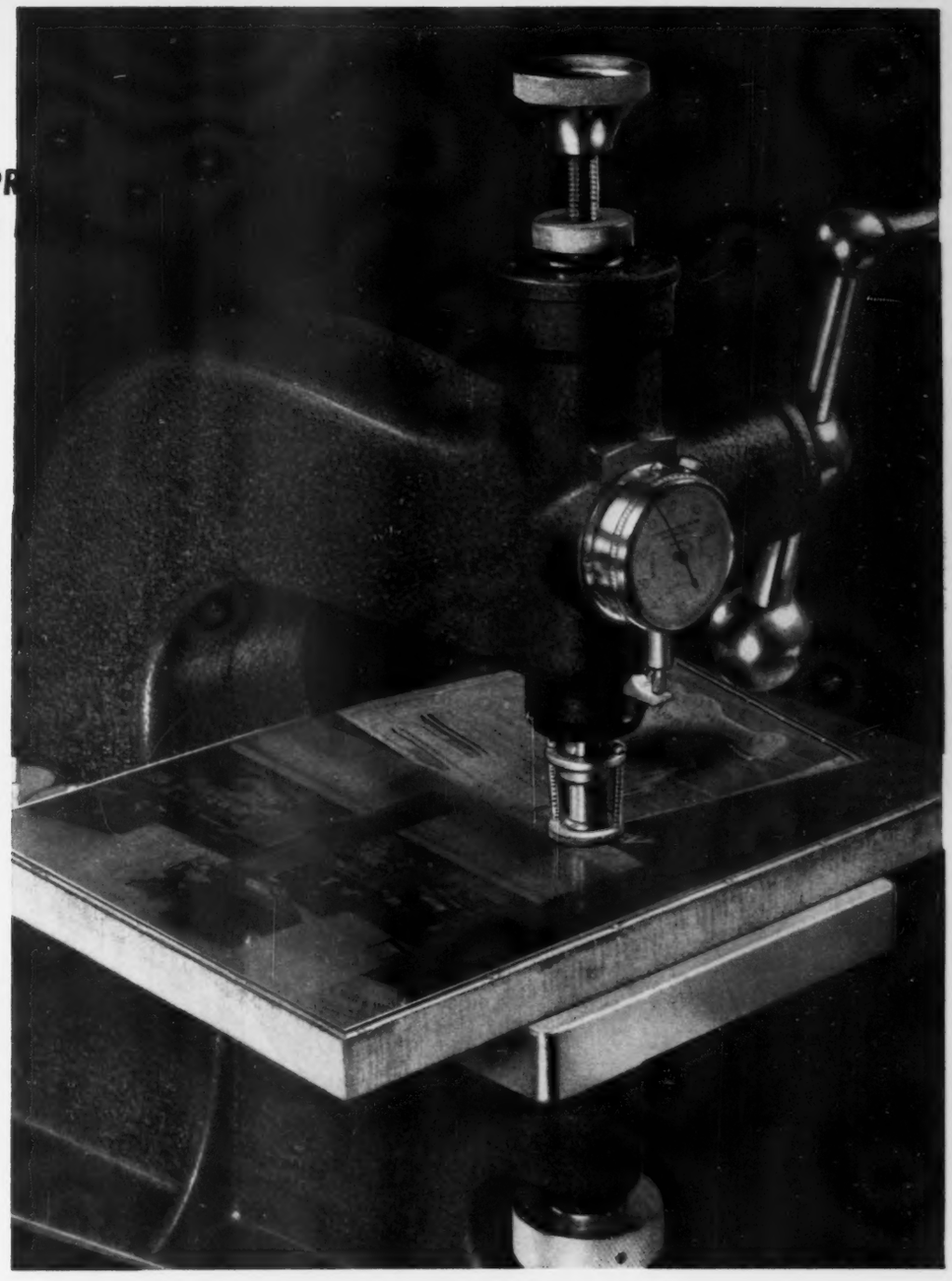
An effortless top speed of 5000 impressions per hour makes possible high "cruising" speeds where stock and forms permit. Speed combined with the Miller SW's versatile and positive feeder and delivery assures highest possible production on all types of work.

The companion press is the Miller 21 x 28 TW Two-Color Letterpress. These two presses assure their users fine and economical presswork with register and impression unsurpassed by any machine of any size now built, and with distribution equal or superior to that of any press of like size. Write for literature.

Miller 21 x 28 TW Two Color Letterpress

MILLER PRINTING MACHINERY CO. **1103 REEDSDALE STREET**
PITTSBURGH 33 . . . . . **PENNSYLVANIA**

ACCURACY IN PR
KEY TO BIGGER



Every printer needs...

These Basic Precision Tools

he way to avoid excessive down time of production presses and get ore printed sheets per machine per hour is to check all printing plates, d slugs and all type before makeup and lockup, instead of doing it later n the press. With Vandercook Gauges, you can tell immediately the act height of a plate under printing pressure. Or, you can check the ickness of slugs under form squeeze, measure the height of type and gs, as well as cylinder packing, patent base, paper and other materials nging from .001″ to 1⅛″ thick. Operation of these gauges is so simple yone can use them. There are no calculations to make. One glance at e large dial gives you the exact height in thousandths. Write for more rmation regarding Vandercook precision gauges.

VANDERCOOK PLATE GAUGES

There are three models available for testing flat plates up to 12", 18" and 26" in width—with no limit to length. Two of these models can be furnished with curved saddles to measure curved as well as flat plates. Each gauge checks plates under printing pressure.

VANDERCOOK TYPE GAUGE

An indispensable tool for measuring the height of type and slugs—more accurately and more quickly than is possible with a micrometer.

VANDERCOOK SLUG GAUGE

A compact precision tool which should be in every modern composing room for measuring the thickness of slugs under form squeeze.

VANDERCOOK PRE-PRESS ...CUTS COSTS!

VANDERCOOK & SONS, INC.

General Office: 900 N. Kilpatrick Ave., Chicago 51, Ill.

The right Machinery and Equipment for Fast, Versatile Newspaper Production

To meet the needs of modern newspaper plants, WOOD presses and pressroom equipment is engineered ... and built ... to stand up under the continuous strain of high-speed production. Our black and white units and color presses alike enjoy long established reputations for dependability

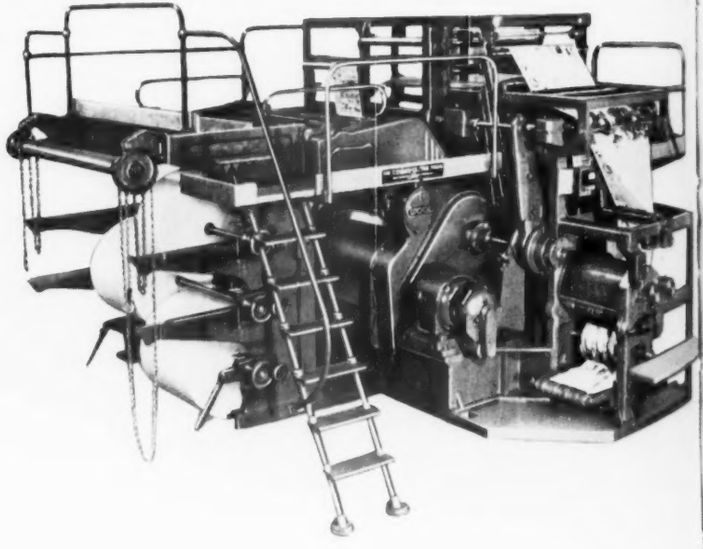
Precision workmanship to extremely close tolerances, plus the use of the *right* materials, combine to produce newspaper machinery that is without a peer from any standpoint of quality, performance and versatility

There is a piece of WOOD equipment, either by itself or used in conjunction with another unit, that will help you produce a better-looking newspaper whether it be a large metropolitan daily or a smaller-city newspaper

NEWSPAPER PRESSES for printing large editions in black and white. Built in any number of units required, equipped with reels, pneumatically controlled tensions, automatic autopasters, etc. Ideal for long, continuous runs

COLOR UNIT used in conjunction with large black and white presses where multi-color is used frequently on high-speed rotary presses for newspapers of large circulation

COSMOPOLITAN PRESS for printing smaller editions in black and white with full provision for color in regular editions. Intraserter provides 2-page jumps on collect runs

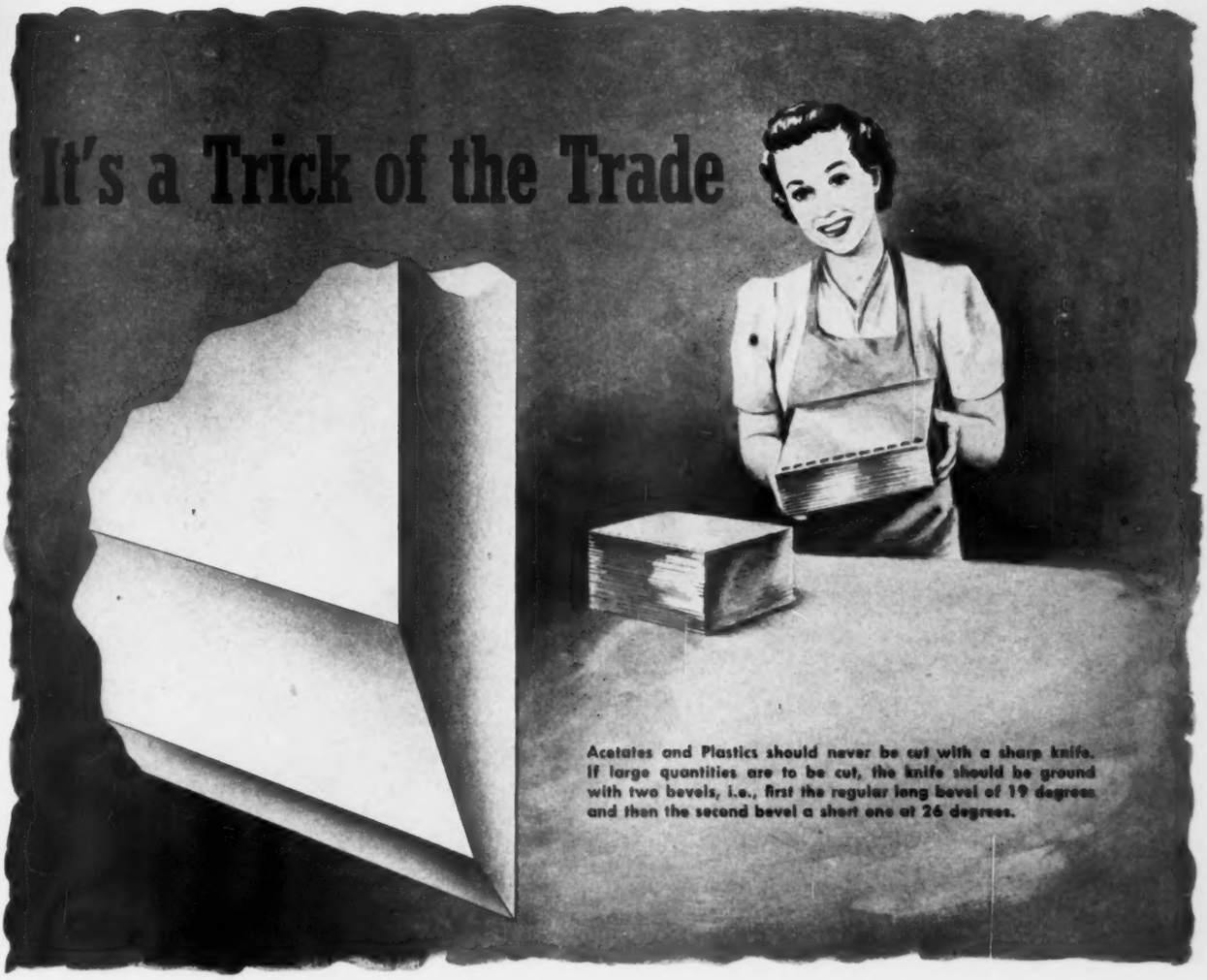


Send for literature describing WOOD presses, pressroom and stereotype equipment

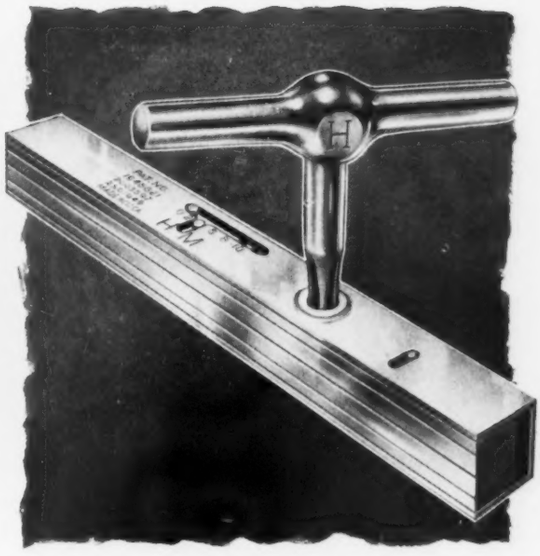
IF IT'S Wood IT'S GOOD

WOOD NEWSPAPER MACHINERY CORPORATION

PLAINFIELD, NEW JERSEY • SALES OFFICE: 501 FIFTH AVENUE, NEW YORK 17


It's a Trick of the Trade
Acetates and Plastics should never be cut with a sharp knife. If large quantities are to be cut, the knife should be ground with two bevels, i.e., first the regular long bevel of 19 degrees and then the second bevel a short one at 26 degrees.

but it's no trick to reduce costly lock-up time with



Made in seven sizes. Write for complete details today!

CHALLENGE® HI-SPEED QUOINS

They may cost more at first . . . but in the long run Challenge Hi-Speed Quoins are the ***most economical*** quoins you can buy! Figure it this way: Since each Hi-Speed Quoin is, in effect, a series of quoins with a single key, only two quoins are needed for forms that usually require up to eight ordinary quoins. And because they are also self-contained units—there is no time lost hunting for parts.

Considering today's high scale for labor, Challenge Hi-Speed Quoins are responsible for savings . . . ***in dollars and cents*** . . . that are not possible with any other quoins! And you'll get a better lock-up, too. The expansion is powerful and direct —no reglets required . . . no work-ups. For Pressroom Economy you can't beat Challenge Hi-Speed Quoins! 706

THE CHALLENGE MACHINERY CO.

Challenge
TRADE-MARK ®

Office, Factories and Show Room:
GRAND HAVEN, MICHIGAN
Over 50 Years in Service of the Graphic Arts

DEALERS IN ALL PRINCIPAL CITIES

for the pressman . . . profit

Rolling cylinders thrill any craftsman who takes pride in his work—the color and sound and smell of the ink gets in his blood! A true craftsman knows that the five form rollers on his Harris rotary letterpress mean richer, sharper blacks—smoother, brighter colors—and a "sock" of heavy solids exactly the way he wants them. The Harris press is a perfectionist's instrument making his job easier and more satisfying. That's part of what we mean by a pressman's profit.

for the press owner . . . profit

Smooth inking is only part of the advantage of Harris presses in the plant owner's eyes. He likes its hairline register on sheet after sheet, hour after hour. He likes the cost record of faster make-ready and greater production speed. He likes more salable sheets per day—they mean greater profits.

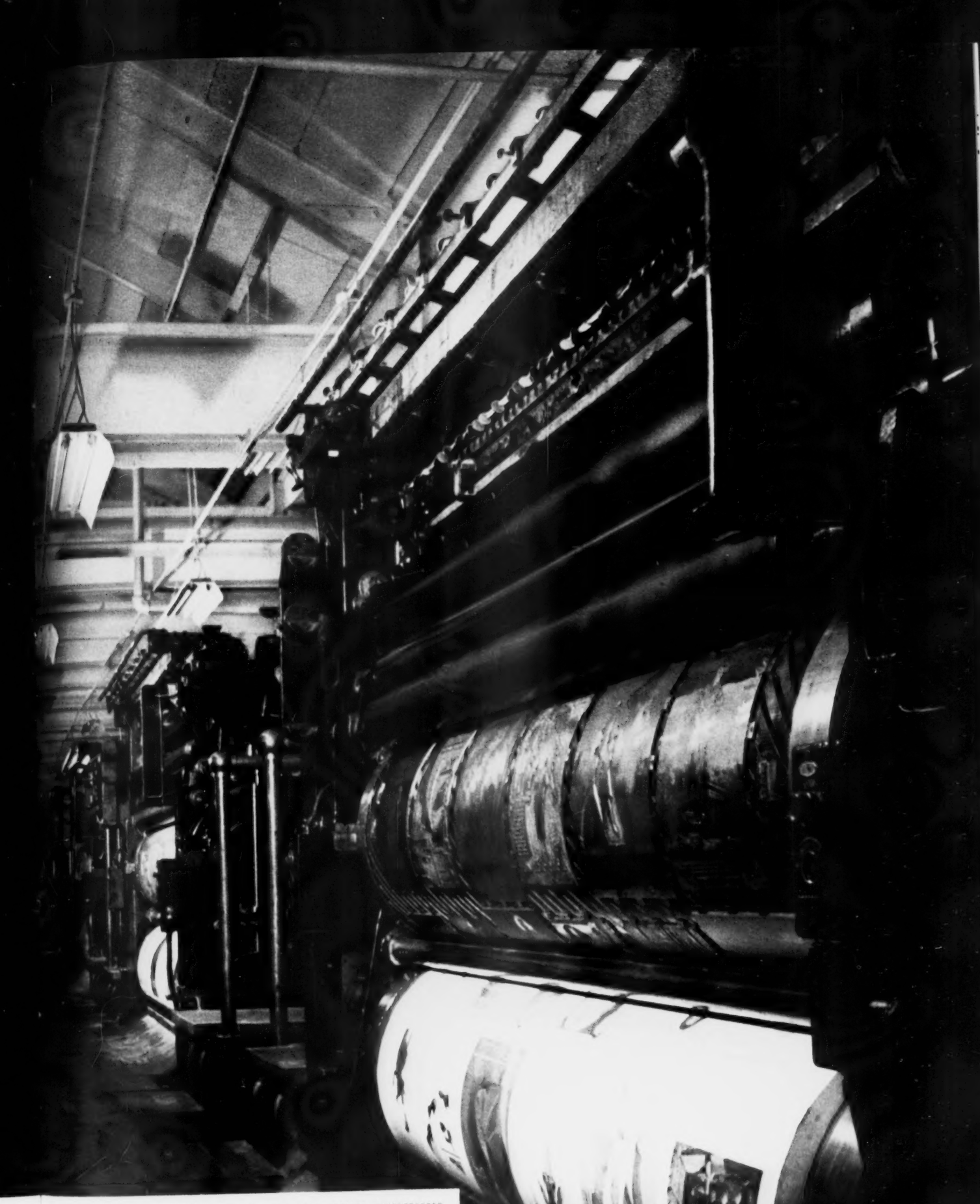
for the buyer of printing . . . profit

Feed rolls and form rollers don't mean much to the printing buyer, but he does appreciate the clean impressions, accurate register and faster delivery which these features produce. He also knows that standard cylinder diameters can save him money on curved electrotypes. He soon learns that Harris-equipped plants can step up his profits by giving him a better run for his money.

for the man-on-the-street . . . profit

Good printing helps make mass distribution possible. The consumer may not know a form roller from a rolling pin, but he is frequently impressed and influenced by the ink-on-paper messages produced with Harris-Seybold equipment.

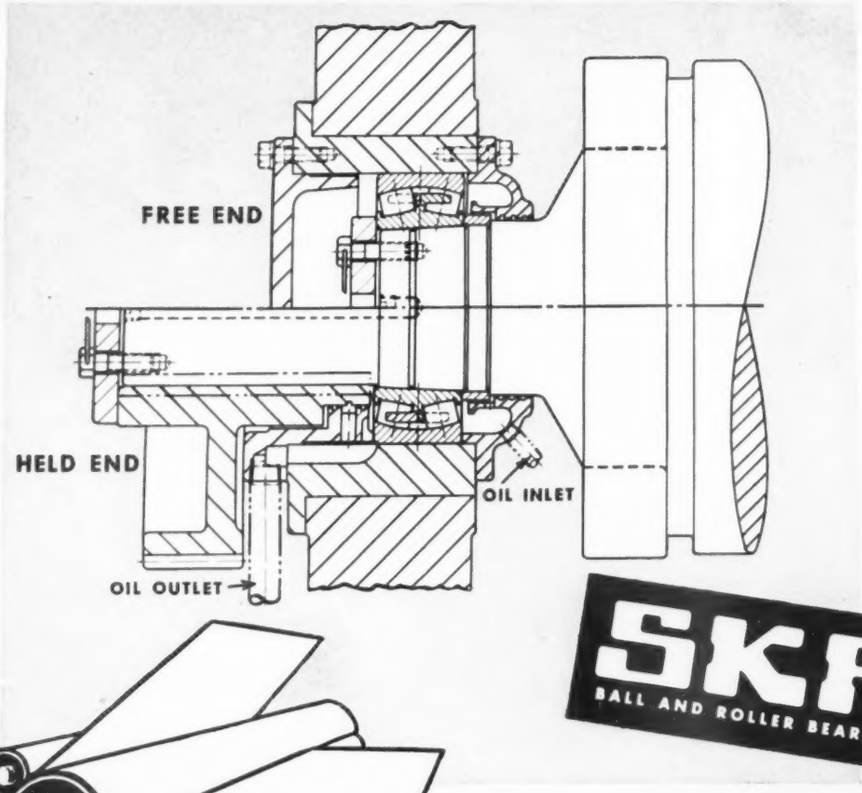
Commercial printing profits everyone, and we're proud to be suppliers to the industry: rotary letterpresses, offset lithographic presses, power paper cutters, paper drills, bindery equipment, litho-chemicals and other fine graphic arts equipment. Service centers in all principal cities Harris-Seybold Company, 4510 East 71st Street, Cleveland 5, Ohio.



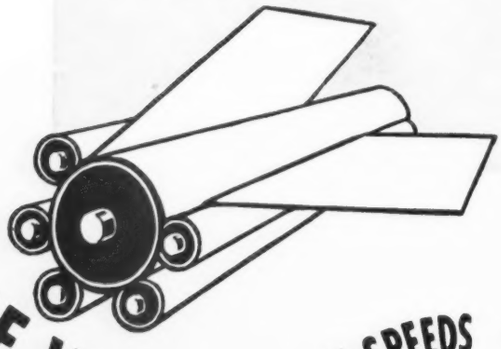
PART OF A BATTERY OF 12 HARRIS MODEL TRG TWO COLOR ROTARY LETTERPRESSES AT CONDE NAST, GREENWICH, CONNECTICUT • COLOR PHOTOGRAPH BY CORNELIUS

fine graphic arts equipment

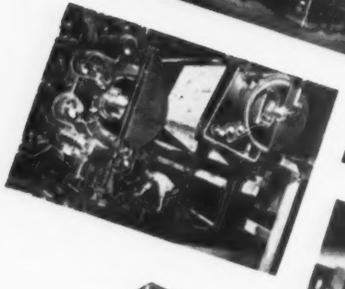
..... for everybody's profit



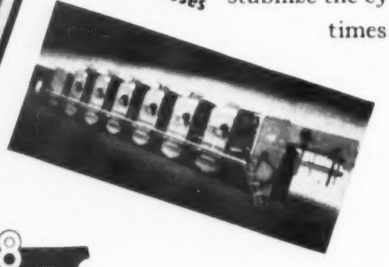
SKF
BALL AND ROLLER BEARINGS



FINE WORK at HIGH SPEEDS with SKF self-aligning printing cylinder bearings



SKF Printing Cylinder Bearing Equipped Presses



The SKF Self-Aligning Printing Cylinder Bearing answers the printing press builder's specifications for a bearing with a "large bore and relatively small outside diameter." SKF engineering features of bearing and mounting have resulted in its wide acceptance on black and color units; magazine presses; metal and paper offset presses, both sheet and web fed; gravure presses. Preload is uniform, eliminating any need for adjustment if replacement is ever necessary. Precision tolerances are applied to all important dimensions. Removal is easy, thanks to SKF's system of hydraulic removal. Simplified design does away with the need for an additional bearing to stabilize the cylinders or take gear thrust. Operation is cool at all times, eliminating undue expansion in the eccentric boxes. These advantages are proof again that SKF engineering helps all industry to put the right bearing in the right place.

7263

REASONS WHY SKF IS PREFERRED BY ALL INDUSTRY

integrity • craftsmanship • metallurgy
tolerance control • surface finish
product uniformity • engineering service
field service

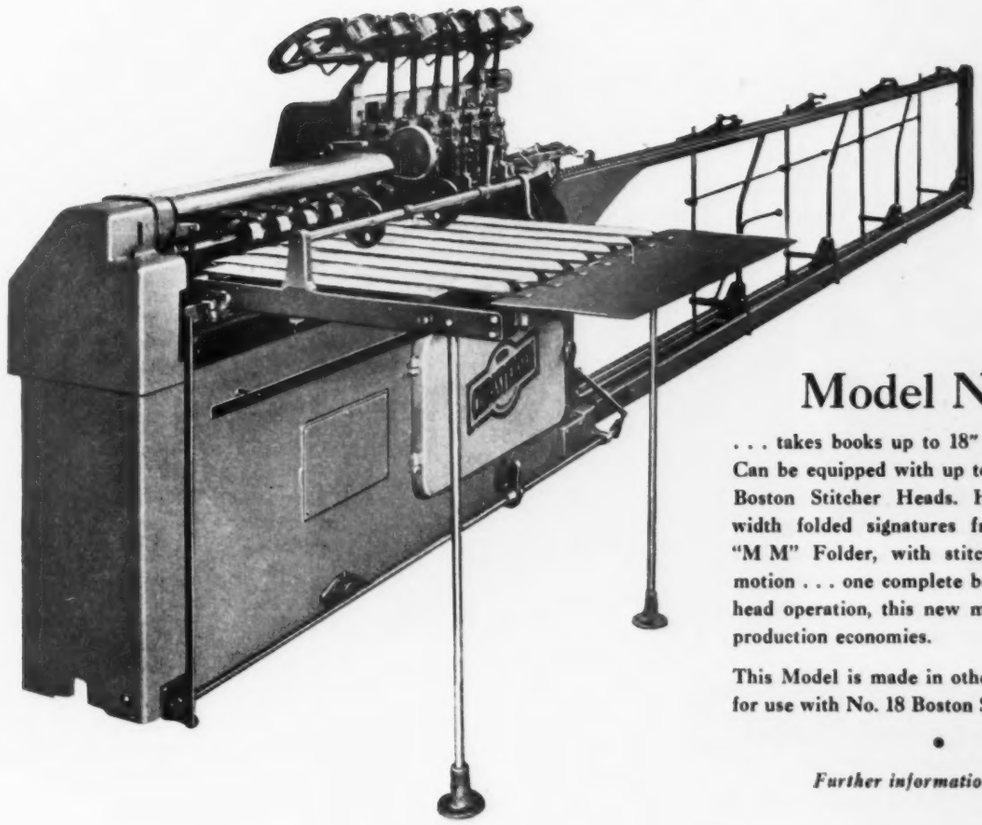
SKF INDUSTRIES, INC., PHILADELPHIA 32, PA.—*manufacturers of* **SKF** *and* HESS-BRIGHT *bearings.*

New Christensen Heavy Duty Stitcher

handles Larger Signatures...with Greater Accuracy... and Operating Convenience

The New Christensen Heavy Duty Stitcher brings you these *Improved Features:*

- 60° angle saddle, instead of the usual 90°. Helps center books for closer accuracy.
- Individual adjustment for each clincher — a further aid to improved accuracy.
- No tapes on delivery rolls. Books are pressed into spring rollers by tucker blade.
- Counter-equipped delivery. Books counted in groups of ten. No setting required.
- Carriage stroke adjustment setting and gears for changing length of conveyor chain travel are located under stitcher heads. No setting adjustment in back of machine.



Model No. 55

. . . takes books up to 18" wide and 30" long. Can be equipped with up to eight ¼" capacity Boston Stitcher Heads. Handling maximum width folded signatures from the Cleveland "M M" Folder, with stitcher heads at slow motion . . . one complete book at each stitcher head operation, this new model opens up new production economies.

This Model is made in other sizes also — and for use with No. 18 Boston Stitcher Head.

•

Further information on request

Christensen • Dexter • McCain

Modern Machines for Printers and Binders

Dexter Folder Company, General Sales Offices, 330 West 42nd Street, New York 18, N. Y.

Associated with the de Florez Company for Special Engineering

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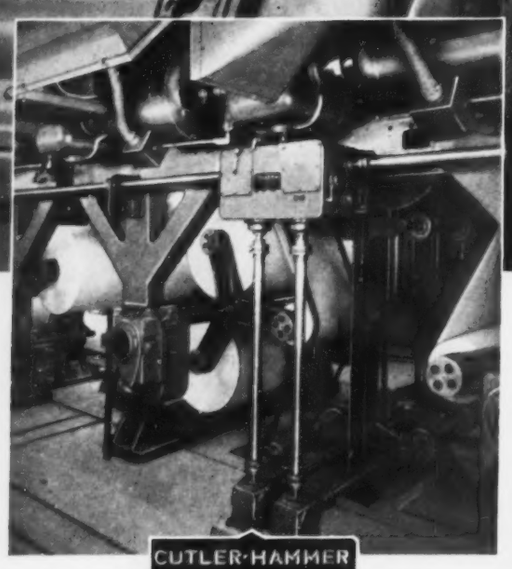
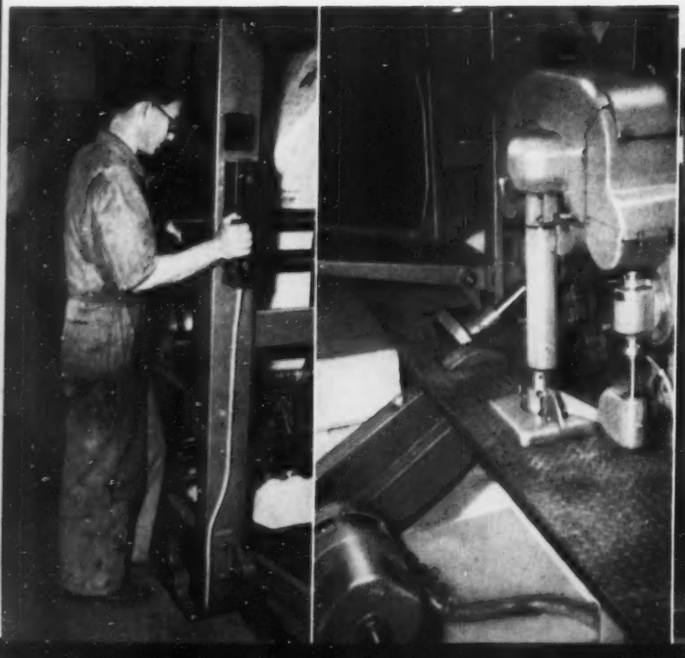


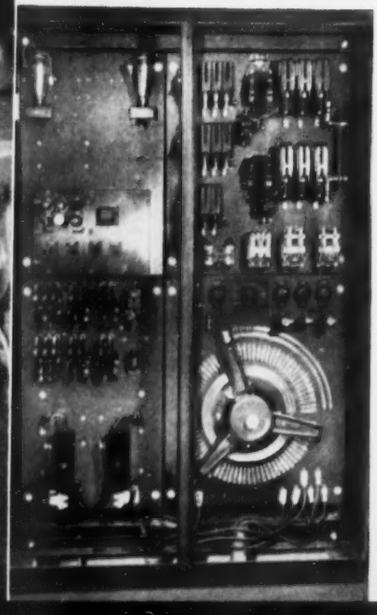
CUTLER-HAMMER
MOTOR CONTROL
C-H

Cutler-Hammer Control for Unit Press Drive used on Goss Headliner Press in plant of

CANTON, OHIO, REPOSITORY

This $600,000 seven unit installation has printing capacity of 45,000 copies of 56 pages per hour, an average delivery of 42,000 per hour. Space for expansion is provided at both ends. Color equipment is included.





CUTLER-HAMMER
MOTOR CONTROL
C-H

Cutler-Hammer Electronic Control for Single Motor Drive on Goss Tubular Press at

GOSHEN, IND., NEWS DEMOCRAT

One of a series of highly successful Cutler-Hammer Electronic Single Motor Drives on tubular type presses. Simple, dependable, highly efficient.

THE CUTLER-HAMMER CONTROL FOR UNIT DRIVE IS THE RIGHT CONTROL

Simple
Dependable
Flexible

Like all controls in the extensive Cutler-Hammer Line of *right* press control equipment, this company's control for unit press drive is marked by the utmost simplicity. Such simplicity in gaining maximum continuous press production actually results in greater dependability and economy of operation, and above all *true* flexibility. This control is easy to understand as well . . . an advantage appreciated by the installing contractor and by the plant electrician who has to maintain electrical operation.

Among its features, each press unit has its own motor—*and each motor has its own control.* As a result, units are easily cut in and cut out. And troubles such as changing load adjusting resistor switches, equalizing the load among motors, circulating currents and excessive current peaks are a thing of the past.

Here also are used tried and true standard industrial control components familiar to the average electrician and requiring no specialists' expert knowledge. Furthermore, all control equipment can be mounted away from the press and installation is relatively simple and economical. Simple and sturdy wound rotor a.c. motors are used, easily installed, aligned and serviced. These motors have ample overload capacity for operating the press at full speed should one motor fail . . . also for driving additional color decks. Their smooth automatic acceleration is provided by the C-H cam drum accelerating device with 72 speed points. The provision of a gearhead motor for inching and threading ends the need to energize the driving motors for these operations. Dynamic braking eliminates the use of a special motor with built-in brakes.

For dependability, flexibility, economy, and for maximum production, specify Cutler-Hammer Control for Unit Press Drives. CUTLER-HAMMER, Inc., 1460 St. Paul Ave., Milwaukee 1, Wis.

CUTLER-HAMMER
WEB BREAK DETECTORS
Stop press instantly if web breaks. Web can be rethreaded without latching detectors. Easy to mount.

CUTLER-HAMMER
MOTOR CONTROL
C-H

CUTLER-HAMMER
WEB SEVERING DEVICE
A Cutler-Hammer "original" that has resulted in greater total savings than any other single accessory. It instantly slashes broken web close to impression and guards against destructive wrap-arounds and costly delays—resets automatically.

Cutler-Hammer Control for Press Drive on Hoe Rotogravure Press in plant of
KABLE BROTHERS,
Mt. Morris, Ill.

These Two Ansco Films Belong in Your Shop!

1.

REPROLITH ORTHO TYPE B FILM

This unusually high-speed film of high contrast is especially well-suited to the production of negative and positive halftones, and for line work from colored or monochrome copy. Its outstanding advantages are these:

HIGH SPEED

Reprolith Ortho Type B is fast. You benefit by shorter exposures when filters are used and time saved in camera and contact exposures.

FULL ORTHOCHROMATIC SENSITIVITY

Filters can be used readily with Reprolith Ortho Type B Film to improve rendition of copy, thus greatly reducing handwork on negatives.

2.

REPROLITH ORTHO TYPE B THIN BASE

This special-purpose film is a companion to Ansco Reprolith Ortho Type B. It brings you the same speed and full orthochromatic sensitivity . . . *all on a low-shrink safety base only .0035" thick!*

This thin base feature makes it an ideal film for halftone positives, overlays, strip-ins, and for making lateral reversals.

All Reprolith Ortho Type B Film is noted for its wide developing latitude . . . its high resolving power . . . clarity in white areas . . . fine dot etching qualities . . . and its steep gradation.

DO YOU HAVE YOUR COPY of

"A Simplified Method for Making Direct Halftone Color Separations"

Ask your Ansco man for a complimentary copy of this informative 8-page Ansco publication. It may simplify color halftone production in your shop. Ask your Ansco Man . . . or write direct.

IN THE GRAPHIC FIELD IT'S ANSCO

ANSCO, Binghamton, New York. A Division of General Aniline & Film Corporation. *"From Research to Reality."*

WESEL

FINAL PLATE MOUNTING SYSTEM

√ Speeds Production
√ Improves Quality
√ Increases Profits

Speed, ease of adjustment and permanency of register make the Wesel Final Plate Mounting System the most efficient system devised. It is in use today in America's biggest printing and publishing plants on all types of presses including those employed in printing magazines, books, cartons, labels, tickets, bottle caps and drinking cups. Wesel Final Base is available in either close-grained nickel iron or lightweight magnesium. Write today for our new booklet explaining how you can profit by using Wesel-equipped presses. It is yours without obligation.

★ INSIST THAT YOUR NEW PRESSES BE WESEL-EQUIPPED
★ LET WESEL MODERNIZE YOUR PRESENT EQUIPMENT

WESEL

MANUFACTURING COMPANY

Factory and General Offices

1141 N. Washington Ave. Scranton 9, Penna.

Manufacturers of Quality Equipment for Photoengravers, Photolithographers, Electrotypers and Stereotypers

"Never missed a deadline because of late pictures"

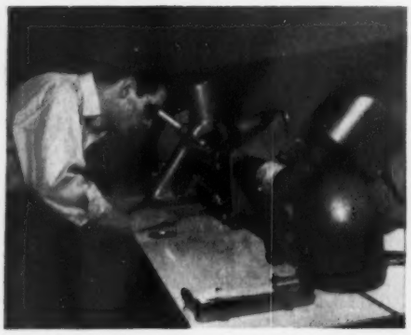
"We mount SCAN-A-GRAVINGS right on the stereo and print direct," says Plymouth (Ind.) Pilot-News Mechanical Superintendent George Towle.

Ever since the *Pilot-News* got a Scan-a-graver they've never missed a press deadline because of pictures being late. Instead of waiting for cuts, the compositor inserts a block the right size and height in the form, the mat is rolled and the stereo cast and locked on the press. When the Scan-a-graving with its double-backed tape reaches the press room, the pressman merely presses it in place and the run is started.

"There's nothing like printing Scan-a-gravings direct," Mr. Towle says. "Anyone can easily learn how to handle them and after that you have no problems at all. We think they're fine."

With only minutes to go before deadline, *Pilot-News* pressman Lewis Wooley, under Mr. Towle's direction, places the last Scan-a-graving for the day's edition on the stereo which has already been mounted on the press.

Pilot-News Photographer-Reporter Charles Frankel catches picture of suspected criminal caught just after 1 p.m. by Plymouth Policeman Bill Watson. The picture was developed, printed, and engraved well in advance of 2 o'clock deadline.



Doubling as stereotyper and Scan-a-graver operator, C. B. Menser says the Scan-a-graver "is the answer to a mechanical man's dream for making halftones. Learning to operate it was easy, and now it seems practically automatic."

Big test came last July when a 140-page centennial edition was produced with 539 Scan-a-gravings totaling 6,000 square inches. Stereos could be cast well ahead with pictures missing and Scan-a-gravings pressed on at press time.

• Want to know more about the Scan-a-graver? *Full information about its advantages and how easily it will fit into your production schedule is available.* Write today to Fairchild Camera and Instrument Corporation, 88-06 Van Wyck Boulevard, Jamaica 1, New York, Department 100-34D.

FAIRCHILD

SCAN-A-GRAVER

No other equipment offers ALL the advantages of

LAKE ERIE ACRAPLATE

Rubber and Plastics Molding Presses

MODEL 11 ACRAPLATE—Designed for smaller work in all types of plants. Unequalled for simplicity of operation and overall economy. 115 tons capacity with 17″ x 22″ platens.

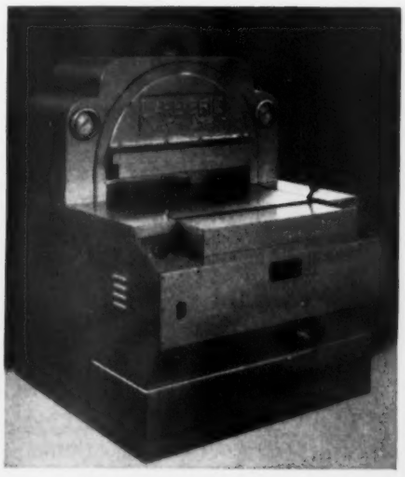
● As more and more printers and publishers discover the reproduction qualities and low cost of rubber and plastic printing plates so do more and more molders ask for Lake Erie ACRAPLATE Presses. ***Today, over 400 ACRAPLATE Presses are in operation ... more than all other makes combined.***

Such preference was to be expected. Since 1936 Lake Erie engineers have devoted their skill to the design and building of plate making equipment which could be depended upon to work efficiently with all available rubber and plastics materials. No other manufacturer can offer similar equipment supported by such a broad experience.

There is an ACRAPLATE model to answer specific requirements for production volume, type or size of jobs going through any plant.

SEND FOR ACRAPLATE BULLETIN NO. 350

and other factual literature proving the economies and better results to be had with plates molded on Lake Erie ACRAPLATE presses. A Lake Erie representative will gladly discuss with you more fully, the superior features of ACRAPLATE presses, which assure better printing plates.



MODEL 55—Developed for plants having requirements for higher pressures than are needed in usual plate work and for limited mat molding. 550 tons, 31″ x 25″ platens.

LAKE ERIE ®

MODELS 18, 27 (illustrated) and 32—Similar, except as to tonnage and platen area. These models cover the widest range of work requirements. Model 18—180 tons capacity with 24″ x 20″ platens. Model 27—270 tons with 31″ x 25″ platens and Model 32—320 tons with 36″ x 28″ platens.

ACRAPLATE ®

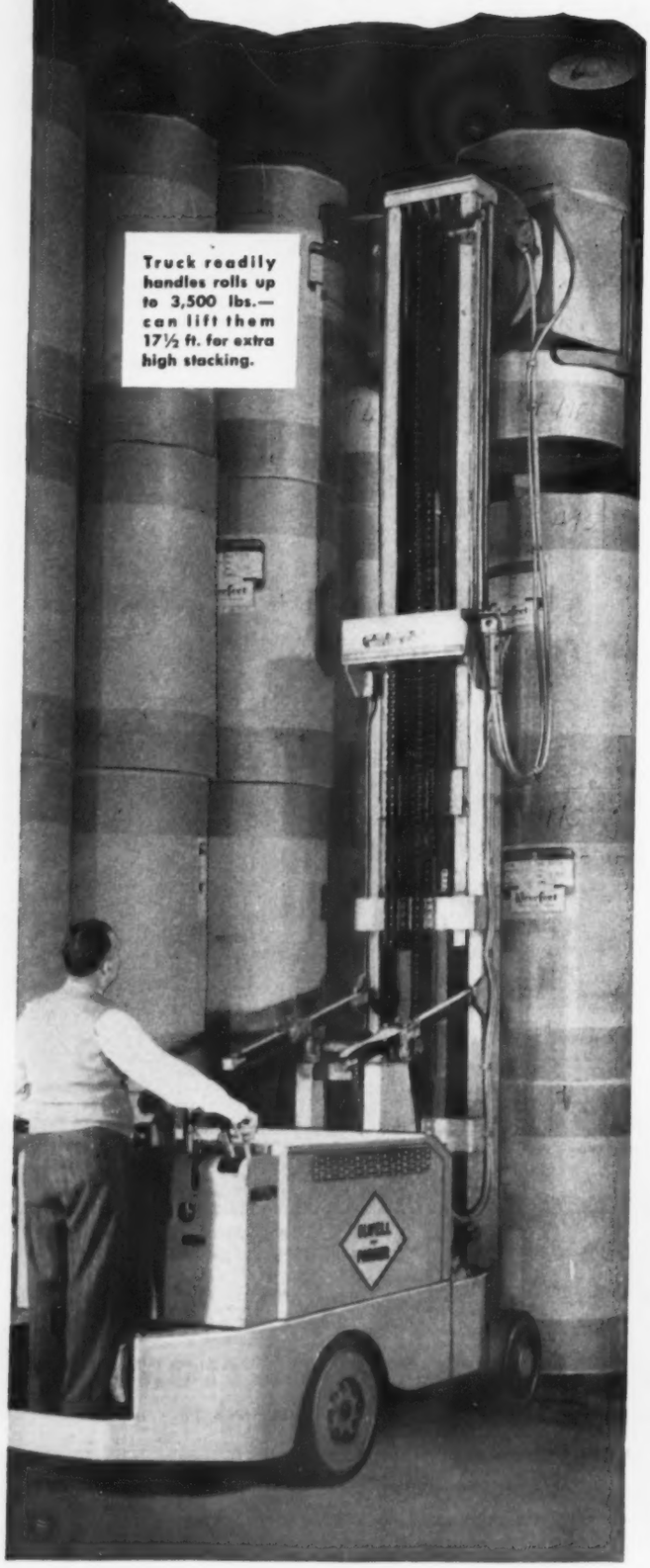
LAKE ERIE
ENGINEERING CORP.
BUFFALO, N.Y. U.S.A.

LAKE ERIE ENGINEERING CORPORATION

General Offices and Plant: **568 Woodward Avenue, Buffalo 17, New York**

● Leading manufacturer of hydraulic presses — 3,500 designs from 5 to 23,000 tons capacity — stereotype molding ... plastics molding ... laminating ... die sinking ... metal working ... forging ... metal extrusion ... waste wood and plywood ... rubber vulcanizing ... special purpose.

Only ELWELL-PARKER'S Roll Handler gives you all these benefits:—



SNUG STACKING—Close, orderly storage, impossible with many similar devices, is easy with this truck because its clamp can securely grip rolls short of their maximum diameter.

ADJUSTABLE CLAMP PRESSURE—Grip is safe and positive, yet pressure can be changed for different papers, and automatically compensates for variations in winding tension of rolls.

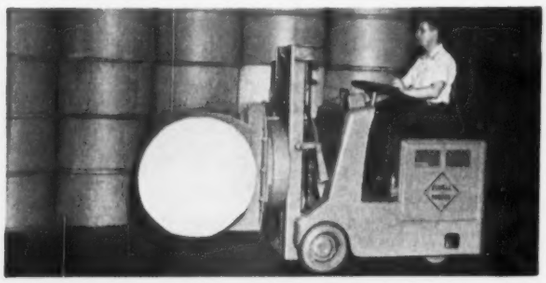
NO PALLETS NEEDED—One user saves 20% in space alone because no dunnage strips or pallets are required.

VERTICAL OR HORIZONTAL HANDLING—This Elwell-Parker will both carry and stack rolls in either position, and can save time by rotating rolls while truck is traveling. In vertical tiering flats are avoided.

NO STOCK DAMAGE—Many E-P roll handlers have quickly repaid their cost by reducing spoilage to practically zero.

GREATER "KNOW-HOW"—Elwell-Parker's experience in the specialized field of roll paper handling is *unequalled.* The unit illustrated is only one of many devices for this work that Elwell-Parker has pioneered and perfected in the last 30 years. E-P engineers understand the problems of winding tension, types of wrapping, and kinds of paper from tissue to kraft. As a result, E-P trucks can deliver *more perfect* rolls to the press or box-making machine.

FREE, ILLUSTRATED BULLETIN. *Write for E-P Reporter No. 8. The Elwell-Parker Electric Co., 4194 St. Clair Ave., Cleveland 3, Ohio.*



ELWELL-PARKER
POWER INDUSTRIAL TRUCKS
Established 1893

NEW PACKING TOP SHEET CUTS DOWN-TIME, IMPROVES QUALITY, RETURNS ITS COST IN BIG SAVINGS!

Try **TRAVEL GRIP**

PATENTED and Patents Pending

Tested and proved superior by largest printers and publishers—now available to all printers everywhere!

Travel Grip—a patented, plastic-coated Packing Top Sheet—has remarkable qualities of tremendous importance to printers. Important in *quality*. Important in *top press* performance. Important in *profits!*

Travel Grip is superior in 17 ways—all of which we will be pleased to describe. Basically, however, the superiorities boil down to these three big points:

1 In carefully controlled tests TRAVEL GRIP cut down-time for top sheet changes by lasting 5 to 10 times as long as ordinary top sheet!

2 Surface quality and resiliency of TRAVEL GRIP make it easier to achieve finest work regardless of your type of equipment!

3 When used as recommended TRAVEL GRIP pays for itself in substantial savings!

If these benefits interest you–and surely they must!–contact your paper merchant or printing supply jobber, or write us for more information. It is not a day too soon to enjoy the benefits of this truly remarkable Packing Top Sheet.

the Miami Valley Coated Paper Company

FRANKLIN, OHIO

LICENSED BY BISHOP-STANSELL AS SOLE MANUFACTURERS OF TRAVEL GRIP

Uncle Mat Says...

6 SERVICE BRANCHES
31 FIELD CREWS TO
SERVE YOU DAY AND NIGHT
COAST-TO-COAST AND CANADA

MATRIX
CONTRAST SERVICE

prevents type slips

like this . .

he had the privilege also of
viewing a number of
rare Egyptian Mummies

Machine operators sometimes "feel" certain errors such as wrong letters and transpositions. If the line in the assembler is easy to read, errors are easily detected and corrected before the lines are cast. In this way, the Matrix Method makes it possible to prevent fully one-third of all errors in original composition.

● Now with Matrix Contrast Colors (red, green, yellow, orange) "wrong font" errors also are quickly detected and positive selection of "pi" matrices is assured (at a glance.) Black and White or Colors are applied to all your matrices, old and new, at a very nominal yearly service charge by trained service crews from coast-to-coast and Canada. A call or letter to our nearest service branch will bring 'reasons why' you should use only the time-tested Matrix Method on your line-casting machines. Do it today!

MATRIX CONTRAST SERVICE

MATRIX CONTRAST CORPORATION
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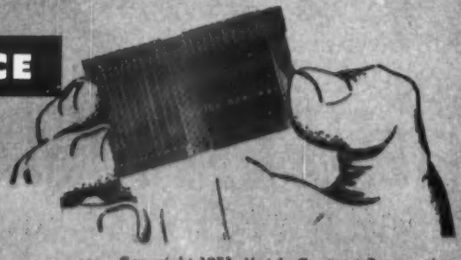

Copyright 1951, Matrix Contrast Corporation

John N. Taylor, energetic President of Dayton Typographic Service, Inc., Dayton, O. Management principles followed by him may sound tough—but they're not. He's a straight-shooting executive in an exacting business.

Typographic Composition

Interesting story about a successful Ohio plant doing wide variety of work in harmony with peculiar requirements of an exacting business

(Written after an interview with John N. Taylor, President, Dayton Typographic Service, Inc., Dayton, O., by MacD. Sinclair.)

THAT time is money and that it is also ephemeral is painfully true with respect to the Advertising Typography business. No one has ever claimed this business is an easy one. Many have tried it in the past but have failed. The business is not alone dependent upon the direction of the worker's skill but it is also dependent upon management's efficient handling of the time element in the manufacturing operations.

The very nature of the business prevents its being operated on a mass production basis such as many industries employ. In fact, it is a made-to-order business in which service and personal attention to the customer, plus a quality product, are dominant factors. Despite the necessity for furnishing satisfactory service under what sometimes may seem to be unreasonable delivery demands and also the necessity for maintaining an expansive library of type faces, there are many typographic composition houses throughout the country which do successfully maintain pleasant and mutually satisfactory relationships with customers.

One of the successful typographic composition houses is that of Dayton Typographic Service, Dayton, O. It is not one of the largest plants in the country, but mutual confidence between its clientele and the company does exist through the management of John N. Taylor. Its principal composition facilities consist of seven Intertypes, three Thompson Typecasters and two Elrod strip-casting machines.

A Critical Business

The typographic composition business might be called a critical one. Customers want expert typographic design and mechanical perfection in composition. A peculiar slant on the business is that the printer-customer in particular is extremely critical of the printability of the product furnished by the typographic compositor. He won't accept slugs that are not square body-wise, letters must be in precise alignment, and slugs must be of equal height from end to end, the printing surfaces of letter characters in individual type composition must not have cold shots and the character faces must have sharp edges; the customer must have prompt service and expresses his impatience if the job isn't delivered to him when he wants it; the customer, more than likely, also expects the typographic composition house to make something beautiful out of copy that may or may not be laid out.

This being the general situation with respect to the typographic compositor, the successful ones have prepared themselves to satisfy these demands. To satisfy customer-demands, the typographic compositor must handle his manufacturing operations in the most efficient manner possible. Plant layout and flow of copy in

Fig. 1.—Part of compact hand assembly section in typographic composition plant of Dayton Typographic Service, Inc., Dayton, O. Note the extended flat work top on the one table. The lower sections of all tables are fitted with galley, racks, slides or material storage to utilize all space to the fullest extent. Ceilings are painted white to obtain maximum reflection from fluorescent lamps. When asked why the aisles were of minimum width, Manager John N. Taylor stated: "We do not have nor do we permit extraneous traffic through the plant. The aisles are of sufficient width to permit workflow and movement of work in process from one position to the other in a direct line. In other plants where dissimilar work is being done, it might be necessary to open the aisle widths."

Expressing the reason for the compact equipment layout in another way would be to say that all materials used by the hand men are within minimum distance of his centralized working space.

In the Dayton Typographic Service plant, one saw is provided for every two men. Mr. Taylor, however, is in agreement with the idea that there should be one saw-trimmer for each worker.

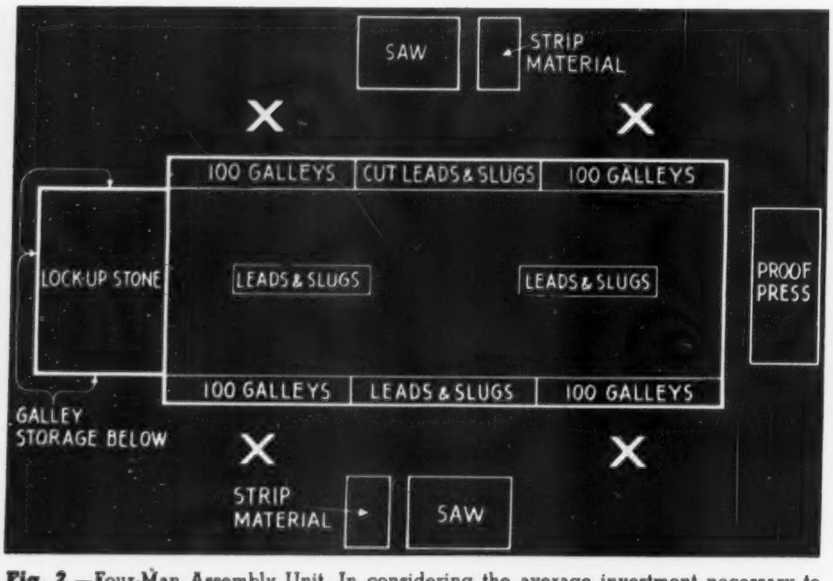

Fig. 2.—Four-Man Assembly Unit. In considering the average investment necessary to provide equipment for four hand assemblers in a typographic composing room, Mr. Taylor prepared the following tabulation as a conservative estimate of the equipment required (exclusive of composing machines or type) as follows:

4 lead and slug racks	$ 400
200 galleys for live work	150
4 galley cabinets	300
2 work tops	400
2 saws	1100
4 light fixtures	100
1 proof press	1800
1 lockup table	450
Total	$4500

In this diagram, the various pieces have been indicated without respect to efficient workflow in every composing room. The lead, slug and rule racks, (See Fig. 1) rest on the work top and do not obstruct a view across the room.

its journey through the composing room must be controlled carefully, meanwhile customer-management relations must be pleasant. It is to the credit of the industry that it usually hires only those craftsmen having the necessary skill and who are capable of working in exacting surroundings that satisfy these customer requirements.

One of the arbitrary requirements of the typographic composition industry is that the composing room layout be arranged to permit efficient operation. In discussing plant layouts, Mr. Taylor said the composing room of Dayton Typographic Service is laid out in straight aisle pattern. Another way to express it is to say that it is laid out on the same principles as the hard-bitten machine shop industry.

Five Basic Operations

Continuing, he said "In the typographic composition business there are five basic manufacturing operations:

"(1) Machine set
"(2) Hand set
"(3) Assembly and makeup
"(4) Proofing
"(5) Storage

Can't Set Type With Feet

"In composition work, it is best that a man not be compelled to walk. No man can set type with his feet. When a keyboard operator is sitting on his 'fanny' he's producing; conversely, when a hand man is standing on his feet, he's producing.

"In all basic composing room layouts the goal should be to achieve the minimum of foot movement on the part of the workers.

"Out of the five basic operations listed above, there is one which management can't control exactly in a typographic composition shop such as ours. The idea that type cases should be placed immediately back of the hand compositor was all right in the old days when the compositor worked with just a few type faces. Now, however, when a compositor must set type from any one or more of 600 type faces, considerable time is lost in the footwork involved going from one case to another."

Mr. Taylor frankly admits that the selection and use of type faces by customers cannot be controlled from a production standpoint. Consequently, no one can control the amount of walking by the compositor in going to and from the cases each containing a separate point size of a large variety of type faces. However, once the compositor has set his line or lines of type from these cases, it should not be necessary for him to leave his assembly station again.

Type Now Cast As Needed

With respect to Mr. Taylor's comments upon hand composition, we will mention an interesting recent development in the plant of Dayton Typographic Service. This is related to the disposal of a considerable tonnage of type. In this

plant all composition is done either on line-slug machines or by hand from type cases. This type was cast on two Thompson typecasters. Not so long ago in thinking over the fact that his firm was carrying 20 T. of type in storage, the total of which amounted in value over $20 thousand, it was determined that it would be cheaper to dispose of the type storage and install a third Thompson typecaster. The cost and operation of the new one would be cheaper than maintenance of the ponderous type storage. Hand-set type is now cast as needed.

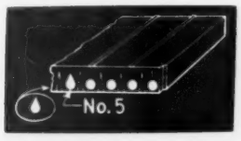

Fig. 5.—In this diagram is illustrated the means for readily identifying in which Intertype the slug was cast in the seven-machine plant of Dayton Typographic Service, Inc., Dayton, O. The jet with the elongated top at left is the fifth from the right, indicating the slug was cast in machine No. 5. It is a simple matter to cut the pot mouthpiece jet as shown with a small chisel. Various schemes for marking slugs to determine from which machine it came have been devised in the past. Some of the methods have consisted of etching molds and/or caps and the ends of liners, but all have had their shortcomings, especially in cases where liners must be changed more or less frequently. Applicable to all but 5 pt. or smaller bodied slugs.

The Shorter Work-day

Introductory to a description of how copy is handled in the plant after it has been received from the customer, Mr. Taylor commented upon the present workday as compared with former times. This discussion occurred because as time passes, management must find ways and means for utilizing to the fullest extent the more limited production time of the worker through efficient plant layout, supervision and work simplification.

Progressively, working hours have been reduced from 12 to 10 to 9 hrs., and in the majority of plants the working day now consists of 7½ hrs. While the longer working day was in existence, it didn't make too much difference if workers took some time out for fun or maybe indulged in just plain or fancy loafing. Now, however, with only 450 min. constituting a work day, there is little time for fun. The shorter the work day the less time there can be for play.

Control of Copy by Management

In the plant of Dayton Typographic Service, Inc., layouts are with most of the jobs, and specifications as to type, measure, etc., are provided on all copy. In all cases, where copy is poorly written or is illegible, it is rewritten on the typewriter.

In the typographic composition business, management must have control of the preparation of copy and of service to the customer. Copy is marked with instructions and design before it is sent to the composing room foreman. Designing is as foreign to production as it is to build-

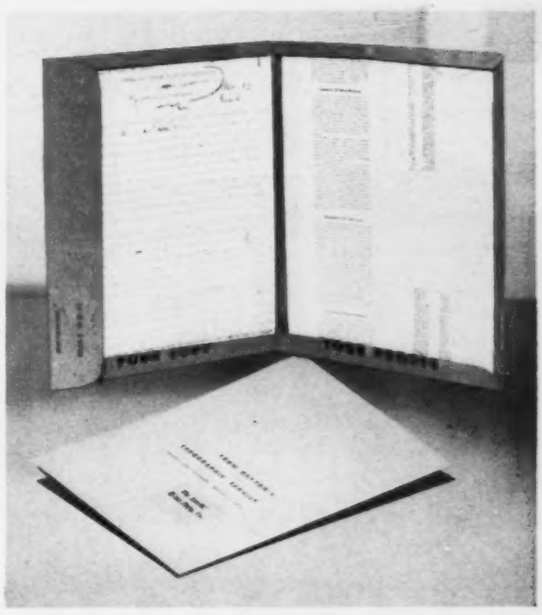

Fig. 3.—In the plant of Dayton (O.) Typographic Service, Inc., proofs and copy are delivered to the customer in a portfolio like this. Portfolios are provided in several sizes. This type of portfolio is a means for insuring that the customer will receive proofs in best possible condition. There is also the personal appeal to the customer that his job is being handled in a manner befitting its importance. The one shown here (folded) measures 8¾ in. wide by 11¼ in. high. Opened, the portfolio measures 17½ in. wide by 8¾ in. high. Portfolio is stout light gray cover stock. Design is printed in darker gray and red ink. Copy is placed in left-hand side and proofs in the right-hand side. The flap at extreme left is time-stamped when copy and proofs are ready for delivery to customer. The flap is then turned over, the folded portfolio with the time stamp showing on the outside. The flap is sealed with gummed paper tape.

Fig. 4.—In the Dayton Typographic Service plant, Dayton, O., typographic composition firm, this man is a specialist when working on a financial composition job that comes into the plant at stated intervals. Revisions are made in the tables at stated times. The revised galleys and corrected slugs are sent direct to this department for insertion of the corrected slugs in the paged composition. The pages are proofed by this man on the little No. 0 Vandercook press immediately back of his imposing table work top. As will be seen, proof paper, ink slab and breyer, tube of ink, type wash can and brush are handy. Much time is saved by centralizing this work. Not only is the compositor experienced at this sort of work, but transporting the galleys to and from proof press is eliminated.

Fig. 6.—One of the stout metal carriers used by Dayton Typographic Service, Inc., Dayton, O., to transport made-up type composition to and from the customer's plant. The particular carrier shown in this illustration is constructed of sheet metal with welded corners. The box measures 9½ in. wide, 14 in. deep, and 7¾ in. high. The cleats permit placing six 8¾ in. by 13 in. galleys with tied-up composition in the carrier. When the galleys are in place, a sheet of chipboard is placed over each page of composition. The galleys are locked in position by the rod with wing nut head by inserting the rod in a hole drilled centrally in the front of the box, after which a nut is turned up at the bottom.

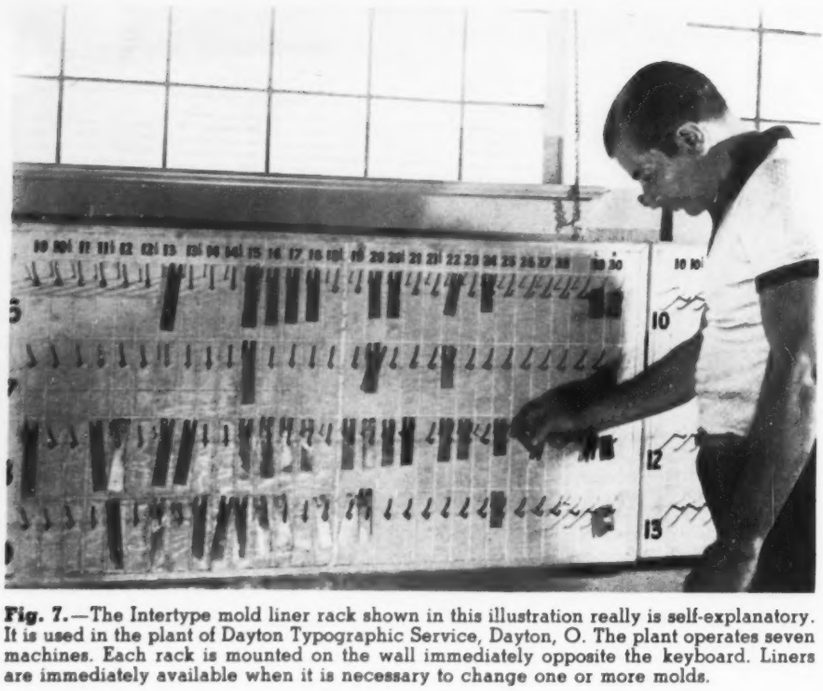

Fig. 7.—The Intertype mold liner rack shown in this illustration really is self-explanatory. It is used in the plant of Dayton Typographic Service, Dayton, O. The plant operates seven machines. Each rack is mounted on the wall immediately opposite the keyboard. Liners are immediately available when it is necessary to change one or more molds.

MACHINIST DAILY REPORT ON INTERTYPE SLUGS FOR WEEK STARTING June 25, 1951

STANDARDS

Height—.919 Plus or Minus .001

Thickness

6 pt.—.084 | 9 pt.—.126 | 12 pt.—.168 | 16 pt.—.224
7 pt.—.098 | 10 pt.—.140 | 13 pt.—.182 | 18 pt.—.252
8 pt.—.112 | 11 pt.—.154 | 14 pt.—.196 | 24 pt.—.336
30 pt.—.420

HEIGHT	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
	8:30 A.M.	2:30 P.M.	8:30 A.M.	2:30 P.M.	8:30 A.M.	2:30 P.M.	8:30 A.M.	2:30 P.M.	8:30 A.M.	2:30 P.M.	8:30 A.M.	2:30 P.M.
No. 1	919		919	918	919	919	919	919	919	919		
No. 2	919	919	919	918	919	919	920	919	919	919		
No. 3	919	919	919	918	919	920	919	918+	919	919		
No. 4	919	918	918	918	918	918	918	918	918	918		
No. 5	918		918	918	918	918	918	919	918	919		
No. 6	918	919	919	919	918	919	919	919	919	920		
No. 7	919+		920	920	920	919	919+	920	919	920		
THICKNESS												
No. 1	126		140	139	140	154	140	140	140	140		
No. 2	112	140	195	168	140	139	084	112	112	139		
No. 3	113	140	082	110	140	140	168	113	140	140		
No. 4	139	139	195	111	112	139	139	112	140	111		
No. 5	070		140	139	139	169	087	140	126	139		
No. 6	154	070	179	125	140	139	140	139	154	139		
No. 7	140		125	126	084	168	139	140	140	167		

Fig. 8.—Slugs from the seven Intertypes in plant of Dayton (O.) Typographic Service, are checked twice on each shift. The height and body measurements are recorded on a loose-leaf blank reproduced in miniature above. Original size of the blank is 8½ in. by 11 in., white bond. The checking of slug measurements is important to a typographic composition shop.

ing automobiles. When a customer calls personally or over the phone, management representatives answer his inquiries about anything pertaining to his job.

Follow the Blue Print

The foreman's primary duty is to handle men—not copy and proofs. He needs no tools with which to work. When he receives copy in the composing room it is the equivalent of receiving a blue print in a manufacturing plant. He instructs his workers to follow the blue print (marked up with or without layout). Thus, over the years, management has been able to overcome the decrease in the various skills of the worker by an increase in worker supervision.

In further explanation of the work of the hand compositor, Mr. Taylor said: "This work can be illustrated by comparing it with a person putting together a jig saw puzzle. The only difference is that the hand compositor, while putting together the many pieces of which a job is comprised, follows the blue print passed along to him by the foreman."

Management's Duty to Reduce Lost Motion

To enable a worker to comply with these requirements, management is responsible for seeing that equipment and materials are arranged to permit the assembler to do his work with minimum physical effort. The conscientious skilled worker likes to labor under those conditions.

When the compositor reads his competently marked-up "blue print", his work is facilitated when type, rule, spacing material, galleys, etc., are within easy reach. Consequently, to make it possible to comply with these principles, fullest advantage will be taken of storage space beneath and on top of assembler's work tops. Aisles will be spaced to minimum width. In a composing room everything should be subordinated to workflow—not to extraneous traffic which will interfere with producing the work at hand.

Assembly Parts at Hand

Mr. Taylor also commented upon certain items that are of particular importance to the typographic composition business. While most plants, more or less, pre-cut leads, slugs and rules into definite lengths and supply them constantly to the compositors' racks, the motive for doing so is not necessarily one of convenience. Keeping the racks supplied with material and having them within easy reach is just like a man building a machine from a blue print. He reads the blue print (marked copy) and selects the part or parts (leads, slugs, rules) from the racks without wasting time taking footsteps or using up physical energy.

He said that in his plant one saw-trimmer is provided for every two hand men (Fig. 1). In line with modern engineering practice, he is in agreement with the idea there should be one saw-trimmer for each man. The reason is practical—any time a compositor wastes a minute, the firm loses money. Thus, since it costs less than $1 per week to own a saw, the investment is profitable.

Proof Presses

Also in line with modern practice, Mr. Taylor thinks separate presses should be provided for each kind of proof and properly located in the production line before the composition is passed to the next operation. Individual presses should be provided for type only, for mixed type and cut composition and for reproduction proof work. It might be observed in this connection that one of the jobs handled at Dayton Typographic Service is a 12 col. financial report. This work is specialized and is handled by one compositor (Fig. 4) To facilitate the work, a Vandercook No. 0 proof press used only on this job rests on a stand immediately back of him so he can prove the pages right away.

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KNOW YOUR LETTERSPACING

LETTER TO LETTER

Markup cannot control the amount of space between letters or the length of the line. The compositor uses no judgment for the characters are set letter to letter. This is the fastest and cheapest method of hand setting type as it requires a minimum of time and skill. This line contains 11 pieces. Notice the uneven spacing between the T and A, the N and D, the I and N and the N and G. To have any less space between these letters they must be mortised or shaved. No markup symbol used.

OUTSTANDING

VISUAL LETTERSPACING

Markup cannot control the amount of space between letters or the length of the line, for the compositor must use his judgment to determine the necessary space. Notice the mortise in the capital T, the space between the I and the N and the G. No standards can create this spacing for the requirements change with each size and style of type. Good visual letterspacing is seldom achieved in the first setting because it is set to please the eye as seen in print—not in metal. Visual letterspacing is costly. This line contains 19 pieces. The markup symbol is Vlsp.

OUTSTANDING

EXTENDED VISUAL LETTERSPACING

Visual letterspacing uses a minimum amount of white space between letters. To open up a line, markup specifies the amount of space to be added to visual letterspacing. This line is set in 8 point visual letterspacing so there are 8 points between the I and the N which sets the standard for the spacing between the other letters. The compositor must use judgment and the length of the line cannot be specified. This line contains 27 pieces. The markup symbol is 8′ Vlsp.

OUTSTANDING

LETTERSPACING TO SPECIFIED MEASURE

Markup determines the length of line only and the compositor must use his judgment in spacing between letters. Usually this is the most difficult of all letterspacing because the compositor must work within a specified width. Mortising and shaving of letters is often necessary This line contains 35 pieces. The markup symbol is lsp to 26 .

OUTSTANDING

MECHANICAL LETTERSPACING

Markup determines the space between the letters and the compositor uses no judgment. The spacing may appear uneven because of the difference in the width of the shoulder and the contour of various letters. This line has 6 points mechanical letterspacing and its length cannot be specified. This is the simplest and easiest of all letterspacing and the line contains 21 pieces. The markup symbol is 6′ lsp.

OUTSTANDING

Fig. 9.—Demonstration illustrating how to specify the five kinds of letterspacing in the plant of Dayton Typographic Service, Inc., Dayton, O. This chart has been slightly reduced in engraving to permit printing on one page.

Coming!
Plant Planning Issue

THE May issue of *Printing Equipment Engineer* will be devoted to Printing Plant Planning. A number of well known printing engineers and writers have prepared helpful articles especially for this issue.

Here are some of the leaders:

You Can Plug 'em If You Will, by Robert Royden Greer

Light *and* Color in the Printing Plant, by Robert W. Dickerson

Some Techniques in Plant Layout, by Ralph B. Tufts

Humidity and Air Conditioning, by Francis A. Westbrook

Workflow Principles for Planning Plant Layouts, by A. C. Arnesen

Floors for the Printing Plant, by Staff Writers

These articles, as a whole, are intended to be useful to printing plant executives when planning for a new plant building or when making revisions in existing plants.

Gravure Executives Hold Meet

THE Gravure Technical Assoc. held its third annual meeting at the Waldorf Astoria Hotel, New York, on Thursday and Friday, February 7 and 8. Approx. 490 people interested in the gravure printing process attended. President Len S. Pinover of Intaglio Service Corp., New York, presided. Funds were voted for the publication of manuals for improving reproduction by standardized procedures in making positives and negatives. The standards are being prepared by the National Joint Educational Committee for Gravure. The committee consists of an official of the APEU, a management representative, a GTA member (one each from Cleveland, Chicago, Detroit, Louisville, New York, Philadelphia, Springfield (O.) and Toronto (Ont.) Can.). Included is John E. Hazel, GTA Secretary-Treasurer, New York.

All previous officers were elected for another term. These are: President, Len S. Pinover, Intaglio Service Corp., New York, N. Y.; Vice President, Howard Canfield, Marathon Corporation; Secretary-Treasurer, John E. Hazel, News Syndicate Co., New York; Asst. Secy.-Treas., Edward S. St. John of Halpin, Keogh & St. John, New York, N. Y.

A number of technical reports were heard. John J. Quinn, Production Mgr. of Pedlar & Ryan, Inc., made it clear that standardization is necessary to achieve a higher degree of uniformity in gravure printing. Production Mgr. Carl Metash of Parade Publications, Inc., discussed progress of GTA cooperation with the American Assoc. of Adv. Agencies and also with the American Newspaper Publishers Assoc. in developing standard ink specifications and a color bar reproduced from a standard density positive etched under standard conditions. President Denis M. Burke of the New York Photoengravers' Union, pledged cooperation of his union with employers in determining standards for improvement in quality of craftsmanship. Gravure Supt. Allen C. Black, Crowell-Collier Pub. Co., Springfield, O., said the manuals on preparation of positives and printing cylinders constituted the backbone of a GTA series in which would be recommended uniform methods which will benefit both buyers and printers.

Vice President Peter J. Dennerlein, Crowell-Collier Pub. Co., Springfield, O., stated that the gravure industry has created a giant with unlimited possibilities. He said that with the use of electronics, precision instruments and laboratory developments the gravure industry can look forward to the photograph of any subject being exact through measuring time and light; to photographic plates, film emulsions and sensitizers controlled to exacting formulas; to elimination of carbon tissue; to cylinder etching controlled by a fraction of a second and to printing speeds not now dreamed of, dependent only upon the mechanisms of cutting and folding signatures and units. These refinements, improvements and inventions, he asserted, will minimize dependency upon the human element which now is 90 per cent of quality printing.

President Arthur H. Motley of Parade Publications, Inc., stated that the most effective selling appeal of gravure rests in emphasizing what the process does for the customer. He said that among the advantages of gravure is better reproduction on less expensive paper for bigger and faster runs to serve an economy based on mass selling.

Edwin C. Kennedy, Vice President of Hearst Pub. Co., and Advertising Manager, stated that the *American Weekly* Sunday supplement will be printed by gravure commencing May 11. A 10 year contract has been entered into with The Cuneo Press, Inc., at a total billing of $60 million. Neo Gravure Printing Co., Cuneo subsidiary, will print 4 million copies weekly in the new $3 million plant in Weehawken, N. J. Neo Gravure, Chicago, will print 4 million copies in its Chicago plant, and 2 million copies will be printed by San Francisco's Neo Gravure plant. The work will be centralized in Weekawken which will supply the other two plants with duplicate positives. The Dultgen color plate process will be used.

Extension of the defense program from three to four years, will not permit an immediate breather for the civilian economy, according to Deputy Director Donald G. Shook, Printing and Publishing Div. of NPA. Supplies of certain materials permit rescinding of some control orders and strengthening and modification of others. The NPA aims to remove controls as soon as possible. The nickel shortage will run for several years and will become more critical. The copper shortage will exist for at least two more years. The printing ink picture is reasonably good. Cobalt is on complete allocation, but ink makers are getting from 60 to 70 per cent of base period usage and approx. 50 per cent of tungsten. Because imports are easing the lead pigment situation, no new lead regulations are foreseeable. All indications point to a modification of Order M-36 in which is provided a setting aside of printing and newspapers for Government purposes. The paper supply situation is much easier, but bonds and offset types still are somewhat tight. The most severe aluminum pinch is expected within the next few months when new steel and aluminum production should be getting into the national supply. The immediate future for civilian construction is not bright. He advised holding off construction work, but if it must be started, be sure of enough supplies to finish the job.

Addresses were made by Warren B. Reese, Asst. to the President of Macbeth Corporation on lighting; Chas. W. LaBlanc, Research Institute of America, who discussed the PIA-LTF Foreman's Training Program; Vernon R. Spitaleri, ANPA Mechanical Dept. Mgr., discussed developments in the newspaper printing industry; C. J. Murray, Gravure Div. Mgr. of Triangle Publications, Inc., told about gravure in Europe.

Harold H. Annis, Manager of Sales Service and Product Development, Oxford Paper Co., served as chairman of a paper and ink panel. William W. Fitzhugh, jr., of Wm. W. Fitzhugh, Inc., was

(*Continued on Page 76*)

They're Going Fast

ENGAGEMENT of display booths for the 1952 ANPA Mechanical Conference is quite active. The Conference will be held at Fairmont Hotel, San Francisco, June 9, 10 and 11 inclusive. The Pacific Newspaper Mechanical Conference will be held in conjunction with the ANPA Mechanical Conference on these dates.

The majority of the allotted booth spaces have been engaged. A limited number are now available. Wire, write or phone to:

Printing Equipment Engineer
1276 West Third St.
Cleveland 13, Ohio
Phone CHerry 1-6645.

The Remaining Means

GRADUAL increases in cost of equipment, materials and labor have made it necessary, particularly for commercial printing plant executives, to find ways and means of reducing printing costs. To hold down the advancing costs, be it said to the credit of management that in many instances it employs truly efficient selling methods. It takes its own medicine by publishing creditable promotion pieces together with paid publication advertising space. Its business policies with customers are pleasant. Its personnel relationships are good. The company maintains membership in a trade association where its executives learn much. Through an established cost system such as the PIA cost finding system, its hour costs are known and applied.

With attention being paid to these various elements, management finds it is not making a profit comparable to that enjoyed by other industries some of which are even more highly competitive than the printing industry.

Seemingly, management may think it has done and is doing everything possible to hold down costs. It wonders whether or not there is some other means for reducing plant operating costs. There are two other avenues. Both may require the expenditure of a reasonable amount of money and adoption of a different approach to plant operating technique.

In the recent past, printers generally liked to consider themselves individualists. Because of enveloping economic conditions, the time has arrived for them to abandon this idea for the simple reason that whatever affects a major segment of the industry is bound to affect all of its components generally.

Gradual increases in cost of equipment, materials and labor have made it necessary for management to find other ways of reducing printing plant operating costs. Looking at the industry from a broad viewpoint, this can be done by encouraging research and by an engineering approach to plant management. The vehicle through which these objectives may be accomplished is the Research and Engineering Council of the Graphic Arts Industry, Inc.

With rare exception, plant management cannot hope to accomplish much along these lines individually. Through an organization such as the Research and Engineering Council, however, a tremendous influence toward the attainment of these objectives will be exerted.

Two major objectives of the Research and Engineering Council are: (1) Encourage scientific research, and (2) Encourage an engineering approach to plant management to improve printing generally and to reduce manufacturing costs.

Other objectives of the Council are: (1) Not to engage in fundamental laboratory research, but to encourage others to do so; (2) To eliminate duplication of research effort; (3) The existence and value of confidential engineering and research programs carried on by individual companies and groups for their immediate benefit is recognized and will be respected; (4) To think in terms of what is good for the industry as an industry. To follow a viewpoint that is long-ranged and not shortsighted, and not limited by the desires of individual groups which might be detrimental to the interest of the industry generally; (5) To approach problems with an affirmative attitude. In response to a need to determine to put the best brains available to work to find an answer. Not to admit to Council meetings the attitude "It can't be done."

It would be silly to assert that by merely joining the Council a firm will be assured immediately of a reduction in plant operating costs. It isn't going to work just that way. But by becoming a member of the Council and having proper executives participate in Council objectives the benefits will come to your company in due time through collective action. *Printing Equipment Engineer* believes the Council offers a powerful means, in addition to the already established management practices, of putting the printing industry on a thoroughly sound basis.

NPA
Printing and Publishing Division

Paper for Weeklies

The National Production Authority has arranged with 15 large daily newspaper publishers to release the required newsprint from their quotas for diversion to the paper merchants supplying more than 800 weekly newspapers.

It was reported that of the nation's nearly 10 thousand weekly papers, 824 were on the verge of closing because they could not obtain the necessary newsprint. The paper merchants in turn had the mills cut up the newsprint rolls into sheets suitable for use on the flatbed presses customarily used by weeklies.

The amount of newsprint diverted to the use of small papers has totaled only a few thousand tons, NPA said. However, not a single weekly has had to close down because of the newsprint shortage. NPA explained that the newsprint shortage has been particularly acute with small weeklies. Their supplies generally come from paper merchants or jobbers whereas large newspapers have direct mill contracts.

Newsprint consumption has risen steadily every year from 1944 until 1950. United States consumption is now at the rate of approx. 79 lbs. of newsprint per capita a year.

Ad Production Problems Are Solved After Dispatch Dept. Installation

By AGNES HENEBRY*

*Librarian, Decatur (Ill.) Herald and Review.

THE Decatur (Ill.) *Herald* and *Review* dispatch system was established to handle display advertising from the time the copy is written by the advertiser until it is ready for the type form in the composing room. After ad copy is received, the dispatch department handles all routine work, and sees that all material for the ad (except type) reaches the right place at the right time. This permits the advertising representatives to devote their time to selling ads and writing copy.

Advantages in the system are threefold. For the most part, sales representatives may forget about ads after the copy reaches the dispatch room. Stereotypers may cast a whole flat of mats each time and need only be concerned with casting the right part of a mat. The composing room can set the type and make up the ads without worrying about which copy should next receive attention or hunting the stereo casts and zinc cuts which are part of the ad.

The dispatch department is set up so that when a composing room ad floorman commences makeup operations on an ad, he receives a tray containing the copy, signature cuts, stereo casts and original engravings, and a galley containing the machine composition for that ad. With this material, it is possible for him to complete the ad without leaving the ad frame.

Personnel and Scope of Work

Dispatch room personnel includes a representative of the advertising department, a representative of the composing room, and girls in the filing section.

The advertising representative keeps track of advertising space and dummies the paper. He coordinates work of the advertising department with the dispatch department and is responsible to the advertising manager.

The composing room markup man indicates the type and machine on which the copy is to be set and feeds copy to ad machine operators and floormen. His desk is in front of a 7 ft. door opening between the dispatch and composing rooms, where he may coordinate flow of copy and proofs between the two departments. He is responsible to the composing room superintendent.

The filing section of the dispatch department handles all routine work on the ads and is responsible to the general manager. At the *Herald* and *Review*, it is a part of a library central filing department staffed by women employees. Usually it takes the time of about seven girls, five days a week each (or about 280 hrs. per week) to handle the dispatch work. Because all members of the library staff are familiar with the dispatch system, it is possible to call in extra assistance at peak periods and to adjust the flow of work to the best advantage for the composing room. As a part of their training, the girls visit the composing room, engraving and stereotype departments where the superintendents explain the work in their departments as it pertains to the operation of the dispatch room.

The dispatch room is open from 7 a.m. to 6 p.m., six days per week, and handles local and national ads for the 13 issues of the *Herald* and *Review*. Its operations include: Picking up copy from stores that write their own ads; Scheduling ads; Looking up stereotype mats, signature cuts, stereo casts and original zinc engravings from the files; Ordering engravings; and marking mats for the stereotype department; Marking copy to show mats and casts; Sorting stereo casts into trays for each ad; Delivering proofs; Pulling and delivering tear sheets; Sorting and filing stereotype mats, flat casts and zinc cuts used, and Returning mats to the advertiser. Girls also assist in dummying the paper on busy days and handle all files and lookups on national ads.

The dispatch department (18 ft. by 24 ft.) is located on the second floor in one end of the library adjoining the composing room. The advertising department is on the first floor at the bottom of the steps leading to the dispatch room.

Stereo Casting

Stereotype flat casting is performed in the basement of the building. A chute in the composing room is used through which mats are dropped eight times daily in canvas bags to the stereotype department. An intercom system is used

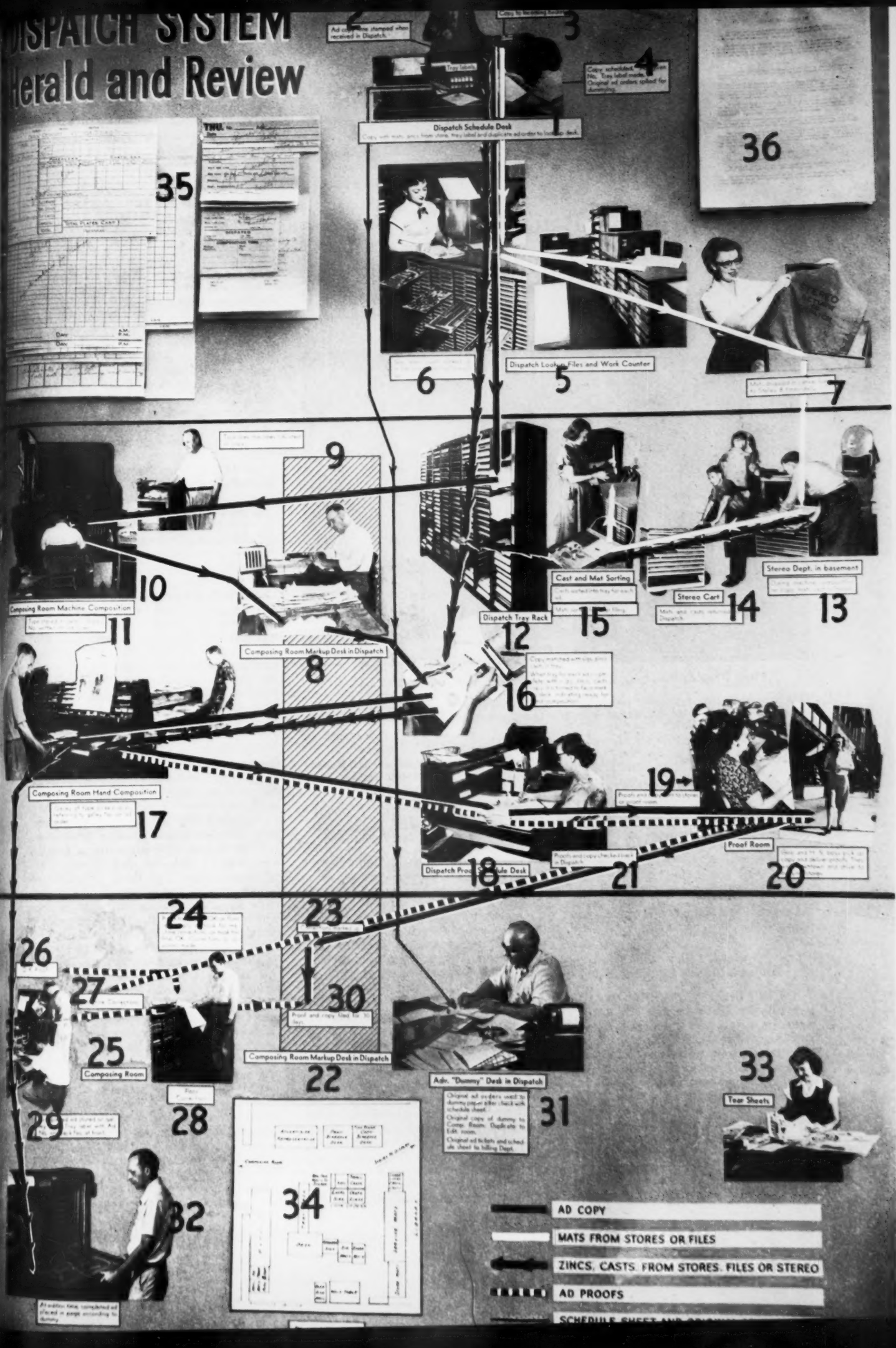
Decatur (Ill.) *Herald* and *Review* Dispatch System

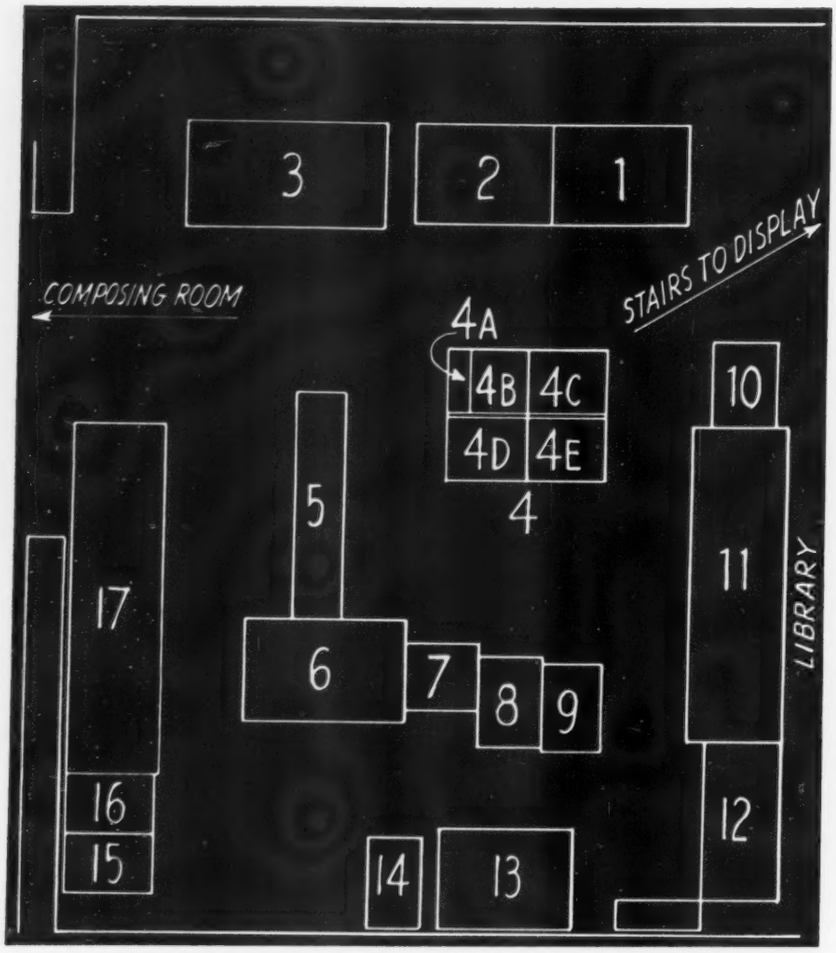
Displayed in picture form on the opposite page is a Chart in which are shown the various operations under the supervision of the Dispatch Dept. at the Decatur (Ill.) *Herald* and *Review*. These operations, although labeled in readily visible form on the original large chart, are numbered here because of greatly reduced size for reader convenience and are keyed to the list below.

Workflow lines are indicated as follows:
Ad copy (heavy black line)
Mats from stores and files (heavy white line)
Engravings and stereo casts from stores, files or stereo department (arrowed black line)
Ad proofs (dotted line)
Schedule sheet and original ad order (thin black line)

1. Dispatch Schedule Desk. Copy with mats and original engravings from store, tray label and duplicate ad order to lookup desk.
2. Ad copy time stamped when received in Dispatch.
3. Copy to incoming basket.
4. Copy scheduled. Ad given number. Tray label made. Original ad orders spiked for dummying.
5. Dispatch Lookup Files and work Counter.
6. Signature cuts, original zinc engravings and stereo casts looked up in files and put in tray for each ad.
7. Mats dropped in canvas bags for the stereotype department eight times daily.
8. Composing room markup desk in Dispatch.
9. Type sizes and machines indicated on copy.
10. Composing Room machine composition.
11. Type stored in galley. Galley number written on ad order.
12. Dispatch tray rack.
13. Stereotype Dept. in basement. During machine composition mats are cast in in the Stereotype Dept.
14. Stereo Truck. Mats and casts returned to dispatch.
15. Stereotype cast and mat sorting. Casts sorted into tray for each ad. Mats sorted for later filing.
16. Copy matched with signature cuts, original zinc engravings and stereo casts in tray. When tray for each ad is complete with signature cuts, original zinc engravings stereo casts and copy; it is turned to face markup desk, indicating ready for hand composition.
17. Composing Room hand composition. Galley of type picked up by referring to galley number on ad order.
18. Dispatch proof schedule desk. Proofs and copy sent to stores or proof room.
19. Proof Room.
20. Messengers pick up copy and deliver proofs. They walk downtown and drive to outlying stores.
21. Proofs and copy checked back in dispatch.
23. Corrections marked up.
24. Proof placed on hook for OK on floor corrections, machine corrections, or for final OK. Corrections or revisions made.
25. Composing Room.
26. OK proofs.
27. Machine corrections.
28. Floor corrections.
29. Completed ad stored on galley rack. Tray label with ad number and rack number at front.
30. Proof and copy filed for 30 days.
31. Advertising dummy desk in Dispatch. Original ad orders used to dummy paper after check with schedule sheet. Original ad tickets and schedule sheet to Billing Dept.
32. At edition time, completed ad placed in page according to dummy.
33. Tear sheets.
34. Dispatch floor plan. (See enlarged floor plan in accompanying diagram).
35. Forms.
36. Explanation of system.

DISPATCH SYSTEM
Herald and Review





Floor Plan of Dispatch Room at Decatur (Ill.) *Herald* and *Review*

This floor plan and equipment identification is reproduced here to enable the reader to better understand the location of the department's equipment in relation to the functioning of the dispatch system.

1. Copy Schedule Desk with Time Stamp
2. Proof Schedule Desk
3. Advertising Representative's Desk
4. Lookup Desk
   - **4a.** Box for mats to Stereotype Dept.
   - **4b.** National advertising casts
   - **4c.** Small stereo casts
   - **4d.** Local signature cuts
   - **4e.** Stereo casts and original zinc engravings
5. Tray Rack
6. Desk
7. Grocery Signatures
8. Signature Mats
9. Store Mats
10. Large Local and National Stereo Casts
11. Service Mats
12. Store Mats
13. Work Table
14. Oversize National Mats
15. National Advertising Mats
16. Ad Proofs and Copy
17. Markup Desk

between the dispatch and stereotype departments for conveying verbal instructions.

Dispatch System Equipment

Specially designed cabinets in the dispatch department save time in hunting signature cuts, stereo casts and original zinc engravings. Each cabinet contains 165 shallow drawers 6¼ in. by 16½ in. by 5/32 in., inside measure. In one cabinet the drawers measure 12½ in. wide for larger national and local material. The depth of each drawer is designed to accommodate the thickness of only one stereotype shell cast, thus preventing the stacking of casts in the drawer. Consistent advertisers are allotted one or more drawers. Miscellaneous drawers for each letter in the alphabet accommodate signature cuts for infrequent advertisers. Such a cabinet reduces the number of scratched stereotype casts, prevents misfiling of material, and provides an easy method in which to clear the files several times a year of out-dated signature cuts.

In a rack a tray for each individual ad is provided. This rack, supplied by Tompkins Printing Equipment Co., is 4 ft., 10 in. high by 5 ft., 9 in. long by 14 in. deep. It accommodates 84 trays size 13½ in. long by 6½ in. wide by 1 3/8 in. deep. Four bins in the rack are used for markup desk copy and proofs going to and from the composing room.

The rack stands between the dispatch room and the ad markup man at the door of the composing room. It is within arm's reach of both departments. Both sides of the rack are open and identical. Dispatch room girls work from one side and the markup man from the other. When the department has assembled all the material for one ad, including copy, signature cuts, stereo casts and original engravings, the tray is turned to face the markup man, indicating it is ready for floor composition.

This enables the composing room floorman to take the tray to his ad frame and with the galley of type, complete the ad without searching for material.

Tray labels, size 1 in. by 6 in., are made out at the time the ad copy is received and scheduled. White tickets indicate *Herald*, green *Review* and yellow Sunday paper copy. Information on these tickets includes the ad number, advertiser's name and the date. This label is placed on the tray where it remains until the ad has been completely assembled, a proof is pulled and is stored on a galley in the composing room. The label is then placed on the galley where it remains until the ad is ready for the page form.

The stereotypers at the *Herald* and *Review* have designed a stereo truck on which mats are returned to the dispatch room from the stereotype department. It measures 20 in. wide by 26 in. long and 20½ in. high and accommodates nine aluminum trays size 19 in. by 24 in. by ¾ in. A pasted flat of mats is placed on each tray, with the sawed-out stereo casts face down on the mats from which they were cast.

When stereotype mats and casts are received in the dispatch room, employees sort the casts into the proper trays. They place mats in a sorter for future filing. If an error in sawing out the cast should occur, it can be detected quickly when casts and mats are compared in the sorting process. This method reduces the number of late re-casts and daily casts are also reduced.

Mat Sorter

The tub sorter is an inexpensive device bought at an office supply company, with alphabetical guides for department stores, A to Z miscellaneous guides for smaller stores, and for each month of the three mat services used at the *Herald* and *Review*. This sorting saves looking through a stack of loose mats if one happens to be needed again that same day. It also is a means for speeding up filing.

After having been cast, the service mats are returned to the page from which they were cut. Half-inch wide masking tape is used on the back of the mats to fasten the cut out illustrations. The tape is removed before casting from the mats again. Approx. one-third of the service mats are used a second time. Several large stores as well as the smaller ones use the mat services. By fastening the mat sections in the position in the full page mat from which they were originally cut out, they are always in their original spots ready for repeated use.

Mats which are the property of stores are filed in legal size 15 in. by 10 in. envelopes or in page size boxes for the larger stores. Mats are returned every week or month as the store requests. Most signature mats are retained in a signature mat file.

Proof and copy trips are made at scheduled hours except in an emergency.

Delivery employees walk to downtown stores and drive to outlying areas. They do no selling and are instructed to discourage verbal messages concerning proofs or copy.

The schedule sheets serve as the master sheets for each edition and contain the complete record of all ads, including the time received, size, proof request, time proof out and in, time revise out and in, markup OK and measured space for billing.

Coordination of Work

Particular attention is paid to the time element in the flow of work at the *Herald* and *Review*. With the advertising representative, composing room markup man and files all in one room, anything out of the ordinary may usually be taken care of immediately within the dispatch department itself.

Daily ad copy deadline is approx. 48 hrs. before edition time. Ads run in both papers, but may start in either. Ad copy deadline for the Sunday paper is at 5 p.m. Thursday. Daily proofs are sent out the day before the edition and due back that same day. Proofs for the Sunday paper are sent out and are due back on Friday afternoon.

Dispatch, stereotype and composing room work and advertising department dummying is coordinated so that each department may accomplish its phase of the operation while the associated part is being completed in another department. There are several opportunities to check for errors as copy and proof flow through the dispatch room. Such scheduling not only saves time in the various departments, but also saves money, wear and tear on nerves and helps meet deadline schedules.

Flow of Copy

Ad copy is time stamped when received in the dispatch department, along with duplicate orders and any stereotype mats or engravings from the store. At the schedule desk, ad copy is scheduled and given a number according to the paper in which it is to appear, a tray label is made for each ad, and the original orders are spiked, to be used later in dummying the paper. The carbon of the order remains with the copy. Engravings are ordered.

At the lookup desk, signature cuts, stereo casts and original engravings are obtained from the files and placed in a tray for each ad. The label, showing insertion date, ad number and advertiser, is placed in the tray for that particular ad. Trays are stored in the rack, facing the dispatch room. Copy is marked with red pencil to indicate which mats, casts, etc., are there or are to come. The part of the mat that is to be used is carefully marked with heavy black pencil, and the insertion date, ad number and advertiser written on the mat. Mats are then dropped in canvas bags to the stereotype department eight different times daily. The layout is checked carefully to see that all copy is there and every illustration is accounted for. The copy is then put in the rack for markup.

The markup man indicates what type is to be used and the machine on which it is to be set. Copy is picked up at the markup desk by the machine operator who returns it to the markup desk when the machine composition is completed. The markup man also writes on the ad order the number of the galley on which the type is stored.

Sorting Stereo Casts

While markup and machine composition operations are being performed, mats are cast in the stereotype department and delivered on the truck to the dispatch room. Sawed-out stereo casts are received face down on the flat of mats from which they were cast. Dispatch department employees sort the stereo casts into the proper trays for each ad and put the mats in a sorter for filing later. A check occurs at this time to be sure all casts were made according to the marking on the mats.

Copy on which machine composition has been completed is taken from the markup desk and matched with the signature cuts, stereo casts and original engravings in the tray for that particular ad. When all components for the ad are assembled, copy is placed in the tray. The tray is turned to face the markup desk, indicating that the ad is ready to be made up. By glancing at the dispatch side of the rack, an employee can determine which ads are still incomplete and follow up on them if marked for an early edition.

By glancing at his side of the rack, the markup man can tell which ads are ready for makeup. He places at the front of his desk the next tray on which he wants the composing room to work. The floor man picks up the tray and takes it to his ad frame. With this tray of copy, signature cuts, stereo casts and original engravings, and the galley containing the machine composition for that ad, he completes the ad. The label is transferred from the tray to the front of the galley and the ad is stored until it is needed for the page. The floorman returns the empty tray, and delivers proof and copy to the markup desk as he picks up his next tray.

Proof and copy are marked out on the schedule sheet and are sent to the proof or store room. They are checked back to the dispatch room on the same schedule sheet. It is a responsibility of the dispatch department to see that proofs are returned by deadline time and any new mats are sent to the stereotype department at the next casting period.

Proof and copy then go to the markup desk where a final check is made to see if there are any corrections to be made. Proofs go to the composing room hooks where corrections or revisions are made. Proof and copy end at the markup desk where the final OK is made on the schedule sheet. Proofs and copy are filed for 30 days.

Color in Advertising

ACCORDING to the findings of the Color Research Laboratory of Sun Chemical Corp., the majority of magazines use color. Lately, in an analysis of several million inquiries, involving 2349 advertisements run by 163 firms, color brought an average of 53 per cent more returns per 100 thousand circulation than did black and white. Color competition today in space advertising is intense, states Sun Chemical.

Dummying Editions

While the composing room and stereotype department are completing their work, the advertising representative collects the original ad orders and schedule sheets with which to dummy that edition. A four-part snapout form is used for the dummy and a budget form for figuring space. Ad numbers, advertiser and sizes are written on the dummy. Complete ads which are to be held in the composing room are marked *Hold* on the dummy so that they'll be saved when the page is torn up. The original dummy sheet and a duplicate budget go to the composing room with a press card and pickup orders. A duplicate dummy and budget go to the editorial room. Two dummy carbons are saved for ads which will repeat in the next edition. Pages containing repeat ads are not disturbed in the next edition unless absolutely necessary. Schedule sheets, original ad orders and the original budget go to the bookkeeping department to be used in billing.

When the pages are broken up in the composing room after the press run, all stereo casts and original engravings are taken to the dispatch department where they are sorted for filing or discarding.

Tear sheets are delivered by the dispatch room girls, or filed for mailing with the invoice.

Handling National Ads

The general advertising department prepares an ad order card from national advertising orders. Dispatch is responsible for all mat, plate and electro files, for lookups, and for getting the correct ad in the paper according to the ad order card. Small engravings, stereo casts, electros, plastic plates and some larger stereotype flat casts are filed in the shallow drawers. Stereo mats and plastic plates are filed vertically and alphabetically according to the account.

Room for Improvement

It probably isn't possible for any two newspapers to use entirely the same dispatch department system. The *Herald* and *Review* dispatch room was started in 1946, and has developed to suit the needs of a smaller newspaper. Many good ideas were borrowed from other newspapers. Surveys were made to determine sizes and number of trays and shallow drawers, use of service mats, etc. There is almost constant effort and experimenting to improve the files and simplify the work at the *Herald* and *Review*.

The ABC of OFFSET

For Letterpress Printers

Series Two

By George Jos. Lenzer

III—COPY HOLDERS FOR TRANSPARENCIES

A DOZEN people, witnessing an accident at a busy intersection in the heart of a city, and viewing it from different points of vantage, will see the occurrence under different conditions and in different light. If these witnesses are asked to describe what they have seen, their descriptions will vary, especially, as regards the important details.

Making a reproduction of a color transparency is no accident. Whatever its purpose or ultimate use, the reproduction is ordered and must be produced. Whether the reproduction meets with the customer's approval depends upon many factors, most important of which is the way the final impression is viewed, compared to the original color transparency.

Invariably, transparency viewing is done under extremely different circumstances and conditions. The customer may see his 35 mm. transparency as a projected image on a special projection screen. The salesman may see it by the light of an off color incandescent lamp bulb or fluorescent tube light. Most probably, the estimator will see the transparency by transmitted sunlight, and when it is in production, the transparency will be seen by the cameraman as an enlarged image on the ground glass in the darkroom. In this instance the transparency will be made visible by transmitted arc light.

It may or may not be masked before photographing, and because of its dye coupled image, which in effect filters the light at the source, photographic color separation is a difficult accomplishment.

Then this selfsame transparency is given to the color correctionist with a set of poorly balanced color definition, separation negatives. With few exceptions, the artist is expected to effect the reproduction with a minimum of hand work, and to incorporate the several different impressions of the colored image as they were experienced by the previous persons or viewers.

Expected To Be Magician

How does the artist view the transparency?

Invariably, he is compelled to view the transparency in the same light as that which is provided for his retouching table, which may be either one or two fluorescent tube lights, or possibly a couple of 100 w. incandescent light bulbs. Whatever the source of illumination, the light is diffused by either ground glass or a sheet of flashed opal glass. If proper reflection and diffusion of the light is not provided, hot spots on the glass surface will result, with varying color changes in the original.

The poor guy is expected to be a magician.

Different Viewing Conditions

The final printed impression, which lacks transparency, is expected to be an exact replica of the dye coupled original transparency. Here, illumination is again at variance. The transparencies are viewed by transmitted light, in order to compare with the printed image which is viewed by reflected light.

If the reproduction appears to be off shade by even the slightest degree, the fingers of all the different viewers point at the correctionist accusingly, and blame him alone for the difference in the appearance of the printed sheet.

This injustice results from one all-inclusive fact, that all interested persons do not see the transparency in the same light.

Transparency Size a Factor

Another contributing factor affecting the reproduction of a transparency, is the size. One advertiser with a yen for amateur color photography, will make a series of shots on a 35 mm. film. One or two of the exposures appeal to him as being the right thing to illustrate a point. Submitting it as copy for reproduction, he may say, "This is what I want, but I want this portion eliminated and take this area down. The color here should not be quite so blue, and over here I think this should be green instead of purple". All the while he is pointing to a projected image of the transparency.

The 35 mm. transparency may then be submitted with a group of others ranging in size from 1½ in. by 2 in. to a possible 5 in. by 7 in. copy of other scenes.

It is obvious that a universal viewer adaptable to all sizes of transparencies is desirable, but not readily attainable. Magnification of the 35 mm. transparency is not always possible with a viewer designed for larger films, and the same viewer is not always available to all persons concerned.

Until such time, that a universal system is developed by which all interested people can view a transparency under similar conditions, there will continue to exist differences of opinion and methods of reproduction.

Platemakers Must Use Ingenuity

Several excellent viewing devices are on the market and available for use. These are of specific design and serve only specific purposes. They are not generally adaptable to all sizes of transparencies, and seldom add to reproduction efficiency.

In order to effectively produce a pleasing, if not an accurate facsimile reproduction, many dodges and devices have been resorted to by individual reproduction process plate makers.

One of the most common dodges in some shops, is to have an enlarged color photo print made of the original transparency. This enlarged color print is then used as the original copy from which all color separations are obtained.

Another method is to have an enlarged black and white photo copy made. This black and white photo print is made to the best size for reproduction purposes, and is used as original copy from which a set of separation negatives is made. The final color reproduction is then made by the fake-color process.

These procedures serve well for the process photographer and to certain extent for the color artist or correctionist. The artist must, however, have an efficient means by which to view the transparency, which, in the final analysis, is the original copy submitted for reproduction.

Viewing Devices

Shown in Fig. 2 are illustrations of some commercial and custom built viewing devices.

At *A* is a magnifying viewer by which an enlarged image of the 35 mm. or "2 x 2" inch slide is seen on a magnifying lens. In effect, it is similar to a miniature TV set with a magnifying complement. For the artist, the magnification is not great enough to bring out the fine detail which may be lost in deep shadow areas.

The viewer shown at *B* provides a slanted opal glass viewing surface upon which the transparency rests while being observed or viewed. Illumination inside the box is provided by 100 w., 3200 deg. Kelvin lamps. There is no magnification or enlargement provided. Each transparency is viewed at its original size, whether it be a 35 mm. or any size up to and including an 8 in. by 10 in. original.

At *C* we have a transparency slide projector. With this device, it is possible to project the image upon a suitable screen. By reason of the lens assembly and focusing attachment, the projected image can

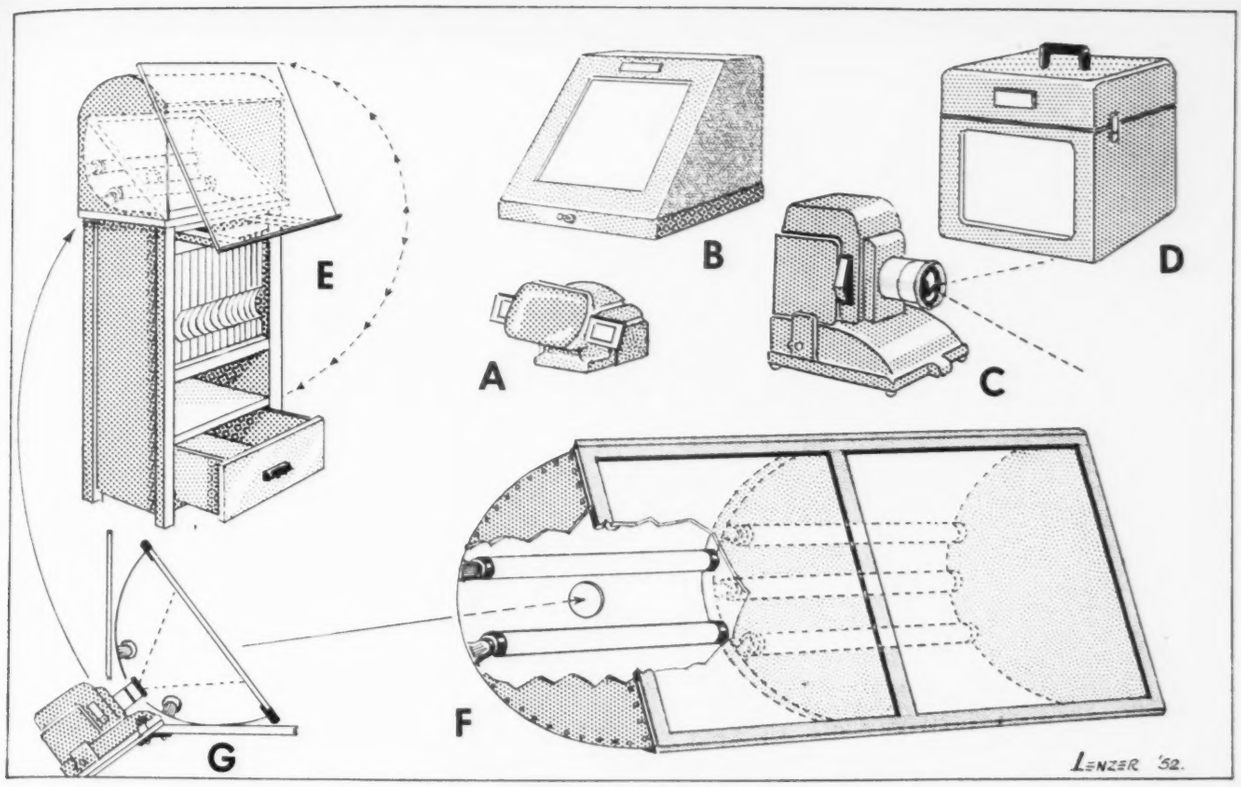


Fig. 2.

be brought into sharp focus, making even the most insignificant detail clearly visible to the viewer or observer. This device will only accommodate slides of a 35 mm. or 2 in. by 2 in. dimension.

A portable viewing device shown at *D* incorporates the advantages illustrated in *B* and *C*. This box contains a built-in projector with a fixed focus lens, which will accommodate 35 mm. and 2 in. by 2 in. slides. It is illuminated by a 100 w. lamp and is equipped with a special transformer to assure uniform illumination. In addition, the box is provided with air vents, designed to overcome or prevent overheating of the unit. By placing a transparency of larger size upon the opal glass window, the same illumination can be utilized for viewing purposes.

Illustrations *E* and *F* demonstrate the ingenuity of some platemakers in designing custom built equipment to best serve their needs.

Depicted at *E* is an approach to a universal transparency viewer and opaque copy holder. On the top of the cabinet is a viewing device which incorporates the features embodied in the viewers *B*, *C* and *D*. Extraneous light interference is curtailed by means of a hood which encloses three sides of the viewing device.

Added features of this cabinet are, (1) A retractile slide to which is attached a hinged plyboard copyholder. When not in use as a copyholder, the copy board can be folded down to serve as a cover lid for the negative storage rack and for the open shelf. (2) The storage rack provides ample room for separation negatives. (3) The open shelf can be utilized for the storage of masking paper and other materiel. (4) Storage of original transparencies and other related material is afforded by the drawer. (5) Fitting the unit with casters or rollers makes the entire unit a mobile piece of furniture.

At *F* is shown a specially constructed artist's retouching table unit, of two sections. The transparency viewing section, (cutaway illustration), is fitted with a projecting unit (like that shown at *C*). Separation negatives can be retouched on the second section. Flashed opal glass covers both sections. Reproduction of a 35 mm. or a 2 in. by 2 in. transparency is more easily accomplished by viewing the enlarged image in the same plane as that required for making the corrections.

Larger transparencies when laid on the surface of the opal glass are illuminated by the same light source contained in the projection unit in addition to that provided by the fluorescent tube lights.

Where reproduction of color transparencies is a frequent occurrence, a setup of this kind is efficient and economical from a production standpoint.

Illustration *G* represents a cross-section view of the arrangements in *E* and *F*.

Some Words of Caution

Constant reference to the importance of Light in this entire series on offset-lith platemaking may seem monotonous. But it must be remembered that where the eyes of a workman are concerned, every precaution should be taken to assure the preservation of his most valuable asset—his eyes. They should not be subjected to an injudicious choice of illumination wherever it is a definite requirement.

All viewing devices and retouching tables should be illuminated with white daylight tubes or bulbs, of a balanced brilliance and intensity. Extraneous light interference, reflection and hot-spots should be eliminated as much as possible.

The human eye can adjust itself quickly to differences in light sources, but only for short periods of time. Whenever the adjustments must be made over long periods of time, the results are extremely harmful to the eye.

Blindness has resulted from too long exposure of the eye to the sun's rays, to the rays of an arc light, and even vast fields of snow have taken their toll in human eyesight. Many automobile accidents can be traced to blindness suffered because of headlight glare and brilliance.

One great cause of eye fatigue is induced by subjecting the eye to protracted exposures to lights of varying colors, brilliance and intensities, under abnormal conditions.

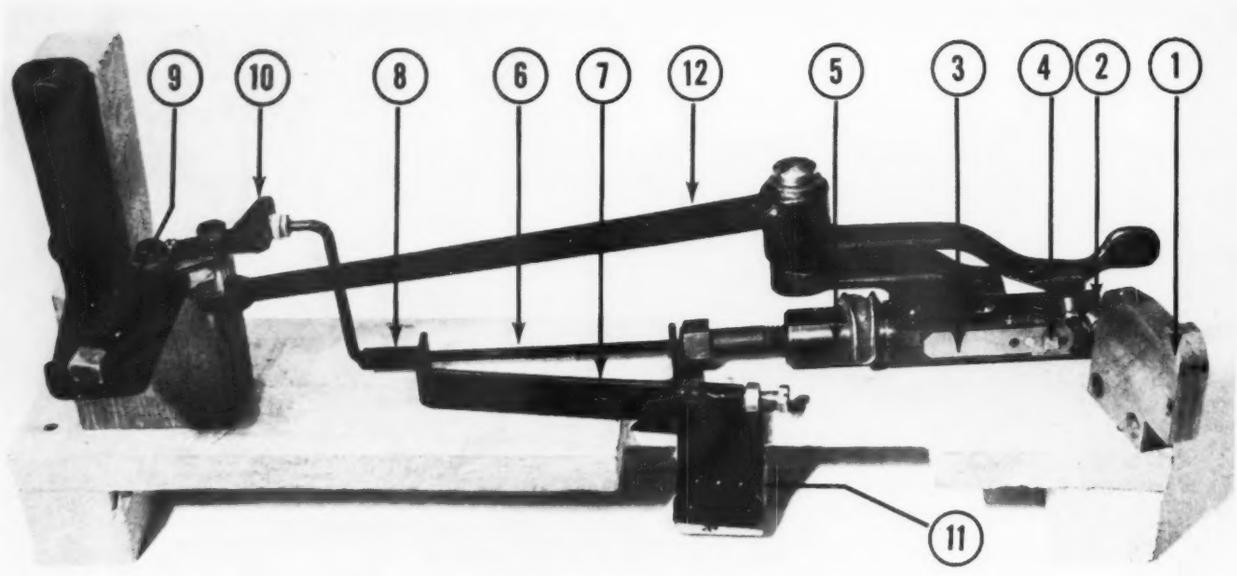
If we concentrate on the standardization of lighting in the camera gallery, it is just as important to concentrate upon the standardization of lighting where the human eye is concerned.

More emphasis will be placed upon the importance of proper lighting in a subsequent chapter dealing with color correction and photomechanical retouching.

(To Be Continued)

Plate Mounting Booklet

AN illustrated booklet entitled *The Wesel Final Plate Mounting System* is available from Wesel Mfg. Co. Wesel Final Base is provided either in close-grained nickel iron or magnesium. Included in the booklet is description of Bull Dog Final Hooks. Mention PEE No. 300 when requesting a copy of this booklet.



Long Line Safety Device for Line-Composing Machines

In the Brusseau-Hazzard device, the usual r.h. vise jaw banking and adjusting screw (E-953) has been replaced by screw (2) in the right side of the jaw and the adjusted position of the jaw in relation to the right end of the slug is determined by banking of screw (2) against banking piece (4) in normally composed matrix lines.

Also note that the standard pot pump lever stop lever operating lever adjusting screw (BB-220) is inoperative with this device and does not actuate the lever to open the pump stop just before the casting stroke of the pot pump lever. Instead, the pump stop is actuated on normal matrix lines when the mold disk moves ahead just before line justification. At this time, mold disk slide bracket (11) causes rod (6) to rotate bell crank lever (10) through a sector of a circle which in turn actuates pump stop lever stop (9) and causes it to move through a sector of a circle to clear the pump lever pump stop block (not shown), thus permitting the pot pump lever to make its casting stroke.

1. Right-hand vise jaw
2. Right-hand vise jaw banking and adjusting screw
3. Sliding segment
4. Right-hand vise jaw banking piece
5. Right-hand vise locking stud
6. Push rod
7. Loop
8. Coupling
9. Pot pump lever stop lever
10. Pump stop lever stop lever bell crank
11. Mold disk slide bracket
12. Pot pump lever stop lever operating lever

Long Line Safety

for Line-Composing Machines

By RALPH THORNTON

A DEVICE for replacing the function of the vise-automatic on line-composing machines in the case of the occasional overset matrix line has been developed by Gene R. Brusseau and the late J. Frank Hazzard, both members of the *Minneapolis Star and Tribune* composing room staff. Otherwise, the vise-automatic functions as usual. The attachment, which may be applied to Linotype and Intertype machines, is known as the Long Line Safety.

While the Long Line Safety is designed to prevent damage to equipment caused by overset (tight) lines, it provides additional benefits for the operator, the composing room machinist and foreman.

All line-composing machines are already equipped with a vise-automatic safety device which prevents squirts on overset matrix lines if kept in proper adjustment. The Long Line Safety adds further protection by preventing squirts when an overset matrix line is sent in to be cast in case of vise-automatic failure. In such case, the line is not cast at all.

The device also functions in another way. If the matrices are redistributed without having had a usable slug cast from them, the operator's take is incomplete, and the story goes into the early edition with a missing line. The Long Line Safety, by blinking the operator's light as described in this article, warns the operator of the omission, so he can reset and cast the line immediately.

Another function of the Long Line Safety is to prevent damage to matrices when an operator tries to force an overset line between the vise jaws. In such case, the mold aligning rails cut into or mash the lower matrix lugs.

The Long Line Safety is not intended to replace the standard vise-automatic mechanism which functions to stop the machine when the first elevator does not settle fully on the vise cap. Its principal function is to prevent the casting operation when an overset matrix line is sent in by the operator (which he will occasionally attempt even if he knows better).

Operation

The action of the machine under various operating conditions is as follows:

Normally Justified Matrix Line—If a normal matrix line (that is, one which will justify properly) is sent in by the operator, the first elevator will settle properly upon the vise cap and the matrix line will be positioned between the left and right-hand vise jaws. When the mold disk is advanced just previous to justification lockup, bracket (11) moves forward also; the forward movement of bracket (11) through connection of loop (7) fastened to rod (6) and slide (3) also permits forward movement of banking piece (4) so that it is positioned opposite banking screw (2) in right-hand vise jaw (1); when the matrix line is expanded, screw (2) banks against banking piece (4) and limits movement of the right-hand vise jaw. Forward movement of the foregoing parts is secured by a coil spring (not shown) placed within the bored-out chamber of the right-hand

Adds More Presses to PAR Service

THE addition of 22 more offset press data sheets to the lithographic section of PIA Production PAR, a pressroom production standards guide for plant management, was recently announced by Printing Industry of America, sponsors of the service. The data sheets contain information on what production should be obtained from both letterpress and offset presses, so that the printer may compare his own output on the same presses with the PAR figures.

This recent addition brings to a total of 101 presses covered. Of this total, 46 are offset and the remainder letterpress presses. Two additional letterpress sheets (for the Miller 21 in. by 28 in. and 27 in. by 41 in. two-color presses) were included in the latest mailing to PAR subscribers.

PIA has announced that the 1952 program for PAR will include publication of production data on operations in other departments of the printing plant. To aid the user of the data, a section entitled *How to prepare your own data with the aid of PAR*, will be mailed to subscribers. It will contain explanations in detail on how to put the guide to use in everyday operations in individual printing plants.

On the same subject, PIA has available for distribution on request a limited number of copies of a previously prepared booklet, *What to do with production standards*, authored by J. M. K. Davis, of Case, Lockwood & Brainard. Davis tells in his booklet how his company is evolving its own production standards and how it uses PAR as a production guide. It is illustrated with charts and diagrams.

The price of PAR service is $24, which entitles the subscriber to all data presently included in the guide, as well as to the additional material to be issued during the coming year.

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vise frame locking stud. (5). It will be seen that a new right-hand jaw banking means is utilized. The standard jaw adjusting screw in the knife block is abandoned. In its place, a spring actuated plunger returns the vise jaws to normal position after an overset matrix line is lifted from between the jaws by the first elevator.

Underset Matrix Line—Normal clearance operation of the vise-automatic occurs; the pot pump lever pump stop on the Linotype remains inactive, and short lines are not cast. The Long Line Safety makes no claim to affect or improve operation of the machine in the event of a loose line, other than that the circuit breaker attached to the pot pump lever shaft will blink the operator's light when a loose line is not cast, just as it does when a long line goes through, because in neither case does the pump cast a slug.

Overset Matrix Line—(This is the contingency for which the Long Line Safety was specifically designed). Mold disk is advanced and with it mold disk slide bracket (11), so that slide (3) starts forward, as in the normal operation outlined above. However, because the right-hand vise jaw (1) is pushed to the right by the overset line, banking piece (4) strikes the side of banking screw head (2) on the right-hand jaw and slide (3) is prevented from completing its forward stroke. Due to the incomplete forward thrust of rod (6), bell crank lever (10) cannot swing pump stop lever (9) clear of the block on the pot pump lever. The pot pump lever thereby remains locked, but the machine completes its cycle and distributes the matrices without damage to them or to the mechanism. As previously described, the operator's light blinks off and on as a signal that the line has not been cast.

It should also be explained in another way that under normal conditions, the right-hand vise jaw banking and jaw adjusting screw (2) banks against boss (4) In the case of an overset matrix line, however, banking screw (2) can move a maximum of 6 pts. to the right before banking boss (4) is moved forward by the advancing mold slide. After an overset matrix line is withdrawn from the vise jaws by the first elevator, a spring actuated plunger moves the r.h. vise jaw back to normal position. This plunger is mounted in the knife block in place of E-953 r.h. vise jaw adjusting screw.

Circuit Breaker

A circuit breaker switch, connected by cord to the operator's overhead keyboard lamp wiring, is mounted on a bracket which is fastened to the left end of the pot pump lever shaft by two 8-32 screws

A circuit breaker switch shoe is applied to the top of the delivery cam, directly above the delivery cam shoe, and both shoes are held in place by 11-24 machine screws. The circuit breaker switch and bracket are adjusted so that the plunger of the switch clears the shoe by about 6 pts. (0.084 in.).

When a normal line is sent through the machine, the switch is lifted *over* the shoe by the action of the pot pump lever shaft as the slug is cast.

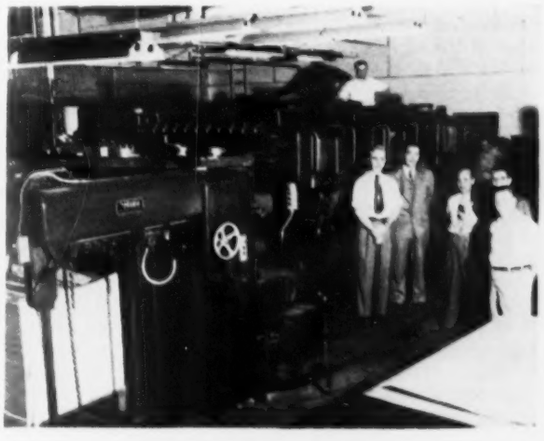
In the event of a loose line, overset line, or any time the pump does not make its casting stroke, the circuit breaker cam shoe comes in contact with the switch plunger. This breaks the circuit and the operator's light goes off, and, after a short space of time, comes back on as a warning of failure of the pump to cast. The interval that the light is off is determined by the length of the circuit braker cam shoe.

WNU Readyprint Suspended

Printed Service, the readyprint or patent insides (two pages printed one side of a four page sheet) for smaller weekly newspapers, will be discontinued March 29, it was announced recently by Western Newspaper Union. The decision to suspend the service came, according to Farwell W. Perry, WNU President, ". . . because mounting costs required a price increase which would have taken the service out of the category of economic value for most weekly papers." Printed Service has been a fixture of weekly newspapers since Civil War days. The announcement stated the company will expand its other syndicated feature services to newspapers. WNU further assured current readyprint users that newsprint equal to the amount included in their Printed Service and feature material in grooved plate, (boiler plate) mat or copy form, will be available.

Carnegie Seminar

Prof. Kenneth Burchard, Head of the Dept. of Printing for the Carnegie Institute of Technology, and Nelson Mitchell, President of the Printing Management Alumni, have announced that the annual Printing Management Seminar and Printers Reunion will be held in Pittsburgh on May 2 and 3. The seminar has become an annual meeting to exchange ideas on management problems of sales, production and personnel. The program is being arranged by Ted Bixler, Edwin H. Stuart Co., and will be outlined in detail within the next month.



Miehle Offset Installation—Pictured here is the Miehle No. 61 sheet-fed Three Color Offset Press was placed in operation recently in the plant of Plough, Inc., Memphis, Tenn. The new press, which has a max. sheet size of 42 in. by 58 in., will be used for printing the St. Joseph Weather Chart Calendar. The Miehle Printing Press & Mfg. Co. reports that the press prints the 12 monthly sheets simultaneously and has a capacity of over 45,000 twelve sheet units each 8 hr. shift. In addition to this press installation, other steps in an expansion and modernization program undertaken by the Plough concern, include the recently completed move to a new building, consolidation of operations, and the installation of a new Miehle No. 56 Two-Color Letterpress. Shown standing beside the three-color press are, from left to right: Mr. Sternberger, G. L. Mitchell, Plant Mgr., and Mr. Ford, all of Plough, Inc.; and Mr. Kayser and Mr. Bryant, both of the Miehle company.

Equipment & Supplies

If you wish additional information concerning equipment, supplies and/or technical literature, please make your request to PRINTING EQUIPMENT *Engineer*, 1276 West Third St., Cleveland 13, Ohio.

When writing to us about any of the items described, and to save your time, just mention in your request the PEE symbol which appears at the end of each description.

Cutting and Creasing Jackets

SEVERAL designs of hardened steel jackets for cutting and creasing operations on cylinder and platen letterpresses have been announced by the Bar-Plate Mfg. Co. The Boxmaker turnbuckle type cutting and creasing jacket (Fig. 1) is designed for use on two-color and single color presses. It was especially developed for heavy duty work in the folding box industry.

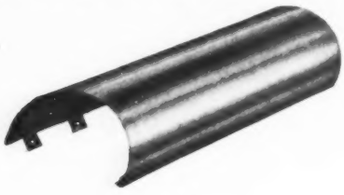


Fig. 1

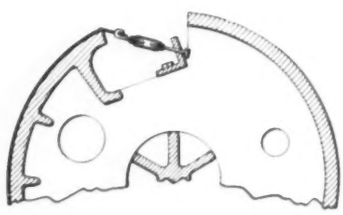


Fig. 2

The Boxmaker is secured in place on the cylinder of the press in the manner illustrated in Fig. 2. Sponsor states that approx. 85 per cent of the total area along this edge of the jacket is allowed for the passage of the transfer grippers. One edge of the curved jacket is fitted with holes for inserting over the cylinder pins while the opposite turnbuckle edge, as shown in Fig. 1, is equipped with 5 or 6 reinforced tabs, each of which is pierced to receive one end of a turnbuckle. The opposite end of each turnbuckle is coupled to a rigid member secured to the cylinder.

The Shirttail jacket (Fig. 3) fits like a top sheet on the cylinder of single and two-color presses. It is fitted with a shirttail which the sponsor describes as a strong fabric having tear and oil resistance, more resistance to stretch and distortion, and longer.

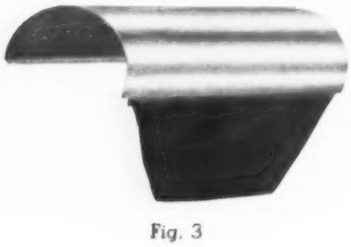


Fig. 3

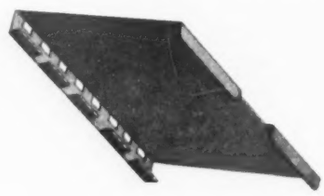


Fig. 4

Fig. 5

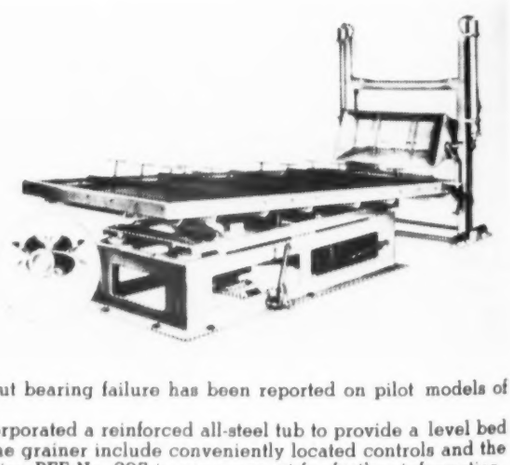
The Clicker jacket (Fig. 4) is designed for Chandler & Price and Kluge platen presses and fits on the platen without the use of screws. A series of gripping fingers along one edge hold the jacket in place on the platen. The opposite edge is formed with a flange which complements the gripping fingers in holding the jacket in place. In Fig. 5 is shown an orthodox plate of hardened steel drilled to fit the platen on all platen presses.

Please write *Printing Equipment Engineer* if more information is desired on these jackets. Refer to PEE No. 270 in your request.

Finger Tip Moistener—A device for moistening the finger tips during hand operations involving feeding, folding, stuffing, counting, gathering, slip sheeting, etc., has been announced by Vegas Mfg. Co., Inc. Called the Kup-Kot Dispenser, it is worn like a wrist watch. Sponsor states the aluminum band and hollow center disk are lightweight and non-rusting. In the disk is a colored sponge soaked with an antiseptic glycerine-type lotion for application of adhesive to finger tips. The Kup-Kot Sorting Lotion is said to contain a mild germicide harmless to the skin. The device is available in small, medium and large sizes. *Printing Equipment Engineer* can furnish more information if you will mention PEE No. 296 in your request.

Mailing Room Bulletin

ILLUSTRATED and explained in a 12 page bulletin, by The Toronto Star, Ltd., is the Wallastar Automatic Bundler for bundling newspapers previous to delivery. Largely pictorial, a number of actual installations in operation are shown. Accompanying the halftones are corresponding diagrams showing various arrangements of the equipment in different mailing rooms. Not-too-long descriptions accompanying each layout. An informative bulletin. When asking for this bulletin, please mention PEE No. 299.

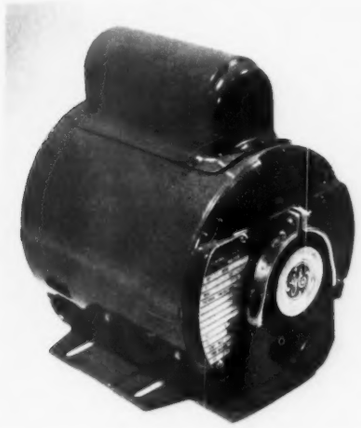


Oxy - Dry Offset Plate Grainer—An offset plate grainer for plates, features planetary ball-bearings and a synchronized center drive, has been introduced by the Oxy-Dry Sprayer Corp., is said to provide fast and more uniform graining. According to sponsor, the major engineering innovation of the grainer is the synchronized planetary action achieved from the new direct center drive and planetary ball-bearings. This synchronized action is said to eliminate breakdowns due to bearing failures. As much as eight years of operation without bearing failure has been reported on pilot models of the machine.

In the Oxy-Dry grainer is incorporated a reinforced all-steel tub to provide a level bed for the plates. Other features of the grainer include conveniently located controls and the use of hydraulic lifts. Please mention PEE No. 295 in your request for further information.

Fractional h.p. Motors

IN General Electric's new Form G line of fractional horsepower motors, states sponsor, are incorporated many radically different and advanced design features. According to G-E engineers, the new motor weighs as much as 51 per cent less per horsepower than the models it replaces, is considerably smaller in size, has increased usability, and improved



View of G-E's Fractional h.p. open drip-proof, capacitor-start, Form G, Motor. This is ½ h.p.

modern appearance. Pictured is a ½ h.p., open drip-proof, capacitor-start Form G, having all-angle sleeve bearings and resilient base mounting.

APPLICATIONS—Type K (polyphase): Delivers constant speed for all standard applications where two- or three-phase power is used—on pumps, compressors, fans, blowers, and other equipment.

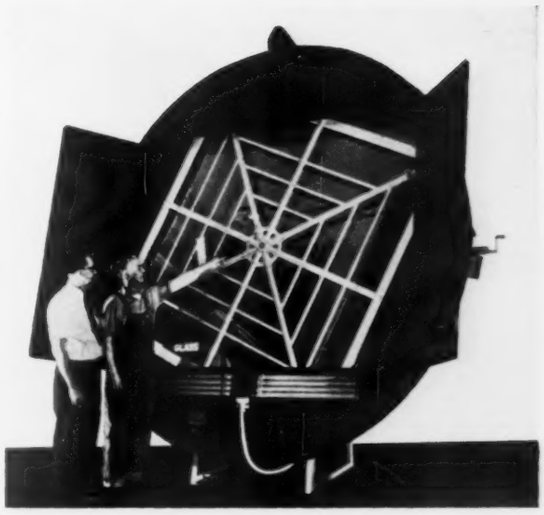
Type KC (capacitor start): For domestic water pumping, farm and dairy equipment, commercial refrigeration, air conditioning, motorized tools, etc., where high starting torque under heavily loaded conditions is required.

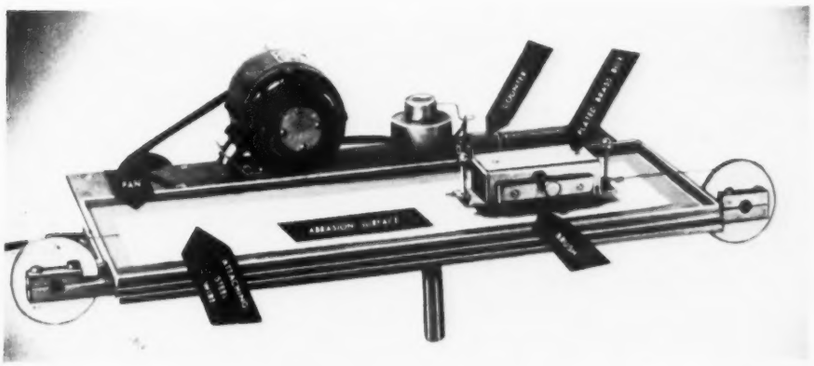
Type KH (split phase): For fans, blowers, centrifugal pumps, oil burners, ironers, office appliances, and many other general applications where moderate starting torque and quiet smooth performance is needed.

Type KCP (permanent split capacitor): For shaft-mounted fans and blowers where quiet, multi-speed operation under constant load is desired.

A 16 page, 8½ in. by 11 in. bulletin, beautifully illustrated in color process printing is available for the asking. Please mention PEE No. 289.

Giant Plate Coater — With two mechanics standing alongside for comparison as to size, Lanston Monotype Machine Co.'s plate coater is pictured holding a sheet of plate glass 50 in. by 70 in. by ¼ in. and weighing some 58 lbs., to be used in the defense effort. All details of its purpose are restricted by the Federal Government. Its minimum capacity for glass or metal plates is 6 in. by 8 in. Tank diam. is 130 in. by 6 in. deep. Actual floor space required is 140 in. wide by 72 in. deep, with operating clearance of 72 in. in front and 36 in. at the right side. The motor and driving mechanism are mounted at the back on the base frame, accessible from the right hand side for servicing. Its speed of rotation is from 36 r.p.m. to 98 r.p.m. Heat, circulated throughout the tank by a 1/15 h.p. fan at the top of the cabinet, is derived from eight heating bars, each 750 w. From its drain connection at the floor to the tip of the fan housing, the overall height is 150 in., and the net weight is 2270 lbs. When requesting further information, please mention PEE No. 287.





Washability and Abrasion Testing Machine

THE Gardner Washability and Abrasion Testing Machine is being announced to the Graphic Arts industry by Gardner Laboratory, Inc. Of immediate interest to the printing industry is its usefulness in testing bleeding resistance or fastness of lithographic inks applied to cardboard containers. Other than paint finish testing, it can be used for obtaining comparative glossiness of waxes and furniture polishes, effectiveness and ease of cleaning of metal polishes, detergency power of soaps, abrasion resistance of linoleum, metal, etc. In this illustration, the Tester is fitted with an oscillating brush for abrasion testing. In an illustrated bulletin, a list of 14 tests for which the No. 105 Testing Machine is suited is given. Machine is equipped with explosion proof ¼ h.p. motor. By mentioning PEE No. 282 *Printing Equipment Engineer* will be glad to pass along your request to manufacturer.

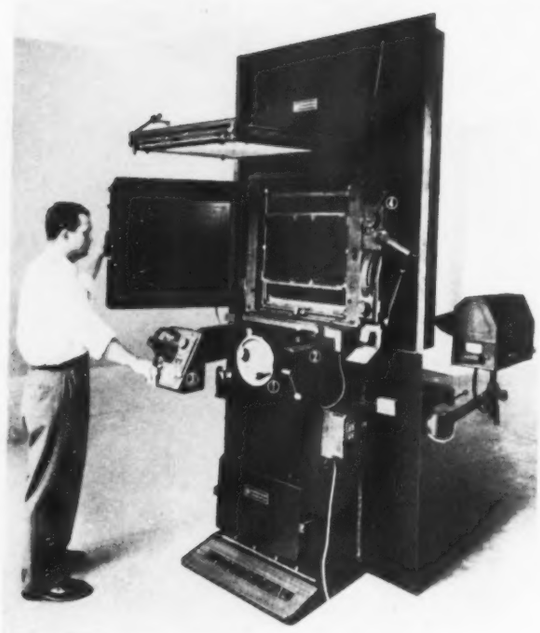
Chemco Side Arm Control

PRECISION in diaphragm control on Chemco Model F Cameras, it is stated, is now possible with the specially designed new Side Arm Diaphragm Control Model 1204. The position of the control mechanism and dial plate permits the operator to view the dial plate at eye level and to face it squarely, without stooping, bending or twisting with each change of stop setting. Accurate settings are said to be more quickly and easily made.

The arm is calibrated for convenience and precision, with markings for normal reductions and enlargements. Guesswork and approximations are claimed to be eliminated. The linkage system of the unit is self braking in that once the arm is set to the required stop, the lens aperture remains at that opening until the arm is re-set to another position, without slip or backlash. A feature of the Side Arm Diaphragm Control is the automatic duplication of the arm setting with the scale on the lens ring. The new Chemco unit is available for all new Chemco Cameras, and many older models now in operation may be fitted with the device. When requesting further information please mention PEE No. 279.

Hand Cleaner

A SOLVENT type hand cleaner developed for use by printers, lithographers and photoengravers, has been announced by the Khemo-Klean Co. Designated Khemo-Klean, sponsor claims the hand cream may be used with or without water to remove several types of stains, grease and grime. The company states that the solvent contains an antiseptic and that no harsh ingredients are used. Approx. 400 washings can be obtained from a 2 lb. quart can, according to the sponsor. If more information is desired, please mention PEE No. 288 in your request.



Color Camera — The Klimsch Super-Autovertical is a vertical precision color camera equipped with automatic focusing, according to Amsterdam Continental Types and Graphic Equipment, Inc. The movement of lens and copyboard is regulated by a progressive spindle, so that it corresponds in every position with the focus formula of the lens. The camera is set either by setting on the given percentage of the direct percentage scale, or by moving the camera until the image on the ground glass has reached the desired size. Other features of the camera include a centralized darkroom control panel and a straight line image reversing mirror that can be attached or removed as desired. More information may be obtained by mentioning PEE No. 292 when writing.

Paper Packaging Machine

THE Series E Morpac Paper Packaging Machine has been developed by the Packaging Machine Div., Lynch Corp. for use by printers, pad, tablet and book manufacturers, paper mills, and paper converters. According to a four page, two color bulletin issued by Lynch, the Model E unit will wrap or band ream paper, pads, tablets, loose leaf fillers, hard or stitch bound books, etc., from 5½ in. by 7½ in. by ¾ in. high up to 10 in. by 15 in. by 5 in. high. Speed of wrapping and sealing packages on the machine is 900 to 1000 packages per hr. Sponsor claims package size can be changed in less than 15 min. Sealing is accomplished with cold liquid paste or glue dried by heat. Copies of the illustrated bulletin may be obtained by requesting PEE No. 272 when writing *Printing Equipment Engineer*.

Testing Instruments Catalog

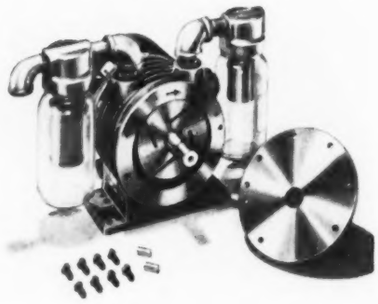
THIS 36 page catalog, illustrated, 8½ in. by 11 in., published by Gardner Laboratory, Inc. contains descriptions of 80 items related to the use of testing instruments such as viscosity gauges, film thickness and film applicators including the Interchemical Thickness Gauge, drying time instrument, abrasion tester, washability and abrasion tester, appearance and color instruments and other instruments. When requesting copy of this catalog please mention PEE No. 281.

Oil-less Air Pump

IT IS claimed that no oil is required in the pumping chamber of three rotary air pump models developed by the Gast Mfg. Corp. Four vanes of carbon sliding in slots in the rotor lubricate themselves. The design is said to eliminate troubles often caused by over-oiling, failure to oil, or use of wrong types of oil by maintenance men.

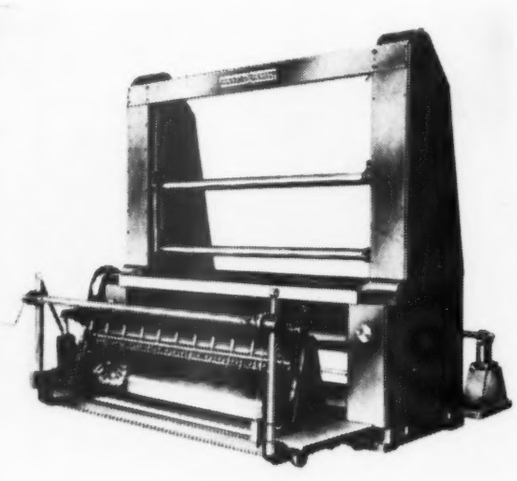
Ball bearings are grease sealed and a ventilated space between bearings and pumping chamber prevents grease from entering the latter. Sponsor states centrifugal force seats the rotor vanes with constant pressure against the housing, resulting in unvarying performance at full rating. Vanes take up their own wear automatically.

The Gast company also claims pumping characteristics are unaffected by temperature changes. Three models are available with oil-less construction. All produce up to 20 in. vacuum and up to 10 lbs. pressure. Model 0740 delivers from 3.5 to 5.6 c.f.m., Model 1550 from 8 to 10.5 c.f.m., and Model 3040 from 17 to 24 c.f.m., according to r.p.m. selected. *Printing Equipment Engineer* will gladly supply more information. Just mention PEE No. 274 in your request.



Gast Oil-less Air Pump Model 3040, with end plate removed to show construction. It is claimed the design eliminates the necessity of oiling these vacuum or pressure pumps.

Slitter and Surface Rewinder—The Bagley & Sewall No. 25 Slitter and Surface Rewinder is designed to accommodate paper rolls from 32 in. to 92 in. long and up to 42 in. diam. Speed capacity of the unit is 2000 f.p.m. It is equipped with power-driven riding roll lift and air operated slitting units for ½ in. wide and up strips. Mechanism is enclosed to prevent dirt particles from entering. The machine is mounted on a heavy bedplate to eliminate vibration, according to the sponsor. More information may be secured by mentioning PEE No. 273 in your request.



Paisley Labeling Manual

A REVISED 8 page illustrated Technical Service Bulletin No. 16 titled *Round Container Labeling*, has been published by Paisley Products, Inc. Sections in the bulletin deal with food container labeling, chemical product container labeling, government specification container labeling, and a description of labeling methods, spot labeling and wrap-around labeling. Illustrated are current machines used for automatic or semi-automatic operation of labeling lines, suitable for glass jars, bottles, tin cans and fiber bodied cans. A selected list of the most popular Paisley labeling adhesives for this equipment and labeling methods is also included. Please mention PEE No. 284 when requesting this bulletin.

Neoprene Treated Paper Bulletin

A SIXTEEN page technical bulletin (illustrated) is available from E. I. du Pont de Nemours & Co. The bulletin is entitled *Neoprene Treated Paper*. The Neoprene treatment of paper is suggested for many uses in the bulletin, including the following papers: Bond, book (uncoated and coated), catalog binding, cover, map, pallett wrapping, poster, sign, and many others. Sponsor explains that du Pont produces the latex and is assisting paper mills in its use, but does

not manufacture any of the new papers. Discussed in the bulletin are: tensile strength, elongation, bursting strength, impact and shock resistance, folding endurance, internal bond strength, scuff resistance, chemical resistance, and other properties. The information contained in the bulletin is intended for consumers of paper products who are interested in developing new and more widely useful paper products, or in securing better service from products not now made with Neoprene treated paper. When requesting a copy of this bulletin please mention PEE No. 294.

Hot Stamping-Embossing Presses

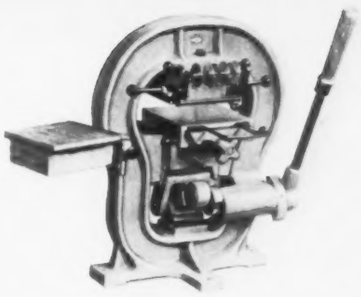
A NEW line of Cramaco Hot Stamping and Embossing Presses has been announced by Craftsmen Machinery Co. These presses are intended for hot stamping or embossing leather,

Above is shown Cramaco Motorized Semi-automatic Hot Stamping and Embossing Press. Made in two models. Equipped with automatic sliding bed, roll leaf attachment, electrically heated head and V belt drive.

imitation leather, cloth, silk, celluloid, plastics, paper, books and other items, by bookbinders, and manufacturers of labels, badges, hats, plastic novelties, candy boxes, and the like.

There are three hand operated bench models: The Utility's bed size is 8 in. by 8 in.; the Universal bed size is $9\frac{3}{4}$ in. by $10\frac{3}{8}$ in., and the Super bed size is $11\frac{3}{4}$ in. by $13\frac{7}{8}$ in. Each is equipped with sliding bed; the head is equipped with sliding plate for mounting dies. Pressure is applied by hand lever and toggle action; standard equipment includes electrically heated head, automatic roll leaf attachment, feed table with drawer, sliding bed and head plates.

Two motorized semi-automatic machines are included among the new models of Cramaco Hot Stamping and Embossing Presses. These are as follows: The Superior's bed size is $11\frac{1}{8}$ in. by $16\frac{1}{8}$ in.; the Junior's bed size is $9\frac{3}{8}$ in.



The Cramaco Hand-operated Hot Stamping and Embossing Press is made in three models, each of which is operated by lever and toggle action.

by $12\frac{1}{4}$ in. Both power-driven models are equipped with automatic sliding bed, automatic roll leaf attachment, electrically heated head, three-way switch for high, medium and low heat, centograde thermometer; a.c. motor mounted in base, directly connected with V belt drive. When asking for additional information, please mention PEE No. 293.

Offset-Lith Chemicals Booklet

A BOOKLET, *Better Press Chemicals for Better Press Runs*, containing illustrated instructions for using lithographic pressroom chemicals, has been published by Harris-Seybold Co.'s Chemical Div. In the booklet are outlined procedures for preparing fountain solutions, gumming plates, applying asphaltum, washing blankets, and restoring images which have gone blind. Photographs show the use of Harris Hydro Etch, Hydrogum, Litho Asphaltum, Lithwash, and Triple Ink in commercial pressrooms. Copies of the booklet are available by mentioning PEE No. 297 in your request.

Battery Charger

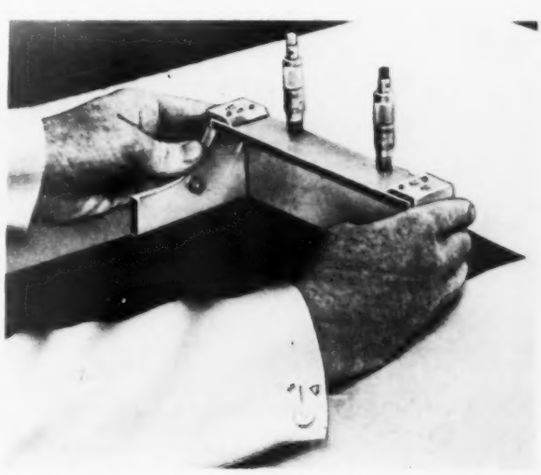
THE Electric Products Co. has issued a four page, two-color bulletin in which is illustrated and described the Type S single-circuit motor generator battery charger for industrial batteries. Sponsor states no manual attention is required during the charge. The unit automatically starts the charging current at the proper value and controls it throughout the charge. Other automatic features of the equipment include shut down in case of power failure, charging resumed when power is restored, and the charger shuts down completely when battery is fully charged. The bulletin also contains a listing designed for the selection of the right charger for standard size truck batteries. Copies of this bulletin No. 10-210 may be obtained by mentioning PEE No. 285 in your request.

Day Star Arc Lamp

THE Day Star Arc Lamp is designed by Miller-Trojan Co., Inc., exposure duty in making offset plates including pre-sensitized types, or photographic silk screen stencils. It is light in weight and

the case is finished in two-tone baked enamel. It is designed for proper convection of heat to prevent excessive heating of the reflector unit. The lamp is 16 amp. and may be plugged into any light socket. When requesting further information please mention PEE No. 286.

Gardner Film Casting Knife — Although this instrument, developed by Hercules Powder Co., has been in existence several years, it has not been available. Henry A. Gardner Laboratories now offers this instrument. Wet films of uniform thickness may be cast with the blade set at the desired opening, laying the device on one end of a sheet of glass plate. The coating material is poured directly in front of the knife blade. The knife is drawn to the other end of the glass plate at a uniform speed of 1 in. to 2 in. per sec. Clearance adjustments are indicated on the two micrometer barrels in increments of 1 mil graduation. The Gardner Casting Knife is available with metal case in sizes ranging by 1 in. from 2 in. wide up to and including 8 in. width. PEE No. 280 should be mentioned when requesting further information.



Autowhirl Saw Hanger

AT THE recent Great Lakes Mechanical Conference in Detroit, P. L. Tollison, Vice President, Wood Newspaper Machinery Corp., discussed Wood's *New Design Saw Hanger for Automatic Casting Machines*. The new design has been named Autowhirl Saw Hanger. In developing the new device, the outside of the existing saw hanger was removed to determine the direction and force of the metal chips. Mr. Tollison related that the chips came from the cutter like hot bullets and shot more than 50 ft. across the floor. From this demonstration it was found that the "fight would have to be taken out of the chips" before they would drop down in a pan. The dust collector principle was employed in designing the housing (Fig. 1) so the chips would be directed into the cylindrical portion by a gradual curve. Once in the cylindrical chamber they whirl around until all their force is exhausted. The chips then drop down into the saw dust pan (Fig. 2). The new hanger may be applied to existing machines. With the new hanger, any dust precipitation is eliminated. The collector may be removed without using tools. Inspection is easy. There is plenty of room for setting the saw. The collector efficiently traps the hot chips so that the floor is clean at all times. When requesting further information, please mention PEE No. 283.

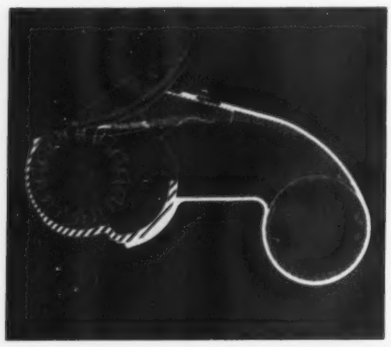


Fig. 1.—Top plan view diagram of Wood Newspaper Machinery Co.'s new Automatic Autoplate Saw Hanger. In this diagram, a newspaper stereotype plate is being trimmed. Note the stream of metal cuttings and dust being directed in a gradual curve around the collecting housing.

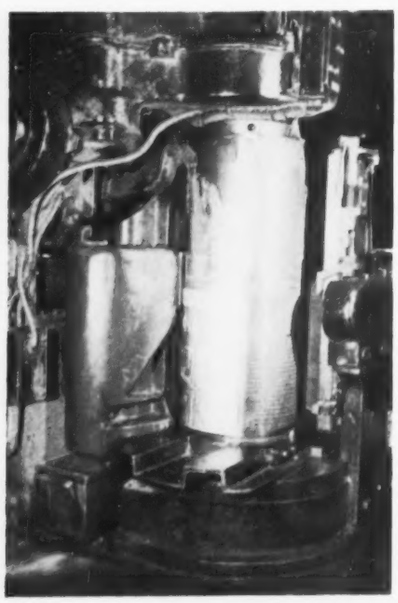
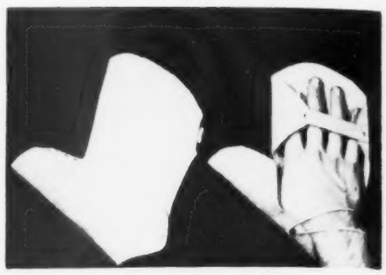


Fig. 2.—View of Wood Automatic Autoplate with new dust collector housing swung to the left. The formed cutter (saw) has partially beveled the stereotype plate. The dust pan at lower left receives metal chips and dust fall after they have exhausted their velocity in the curved housing.

Stroboscope Bulletin

AS explained in a bulletin dealing with stroboscopes prepared by General Radio Co., the instruments, among other uses, are used to maintain accuracy in color register and continuous form printing. The electronic stroboscope is a generator of accurately timed light flashes. It permits rotating, vibrating, reciprocating, and other periodically moving objects to be viewed as if they were stopped or were moving very slowly. The stroboscope may be used to measure speed and to examine machine operations in slow motion. An explanation of how the stroboscope works is given together with specific applications of the different instruments. Detailed specifications are included. Copies may be obtained through *Printing Equipment Engineer*. Just mention PEE No. 290 in your request.



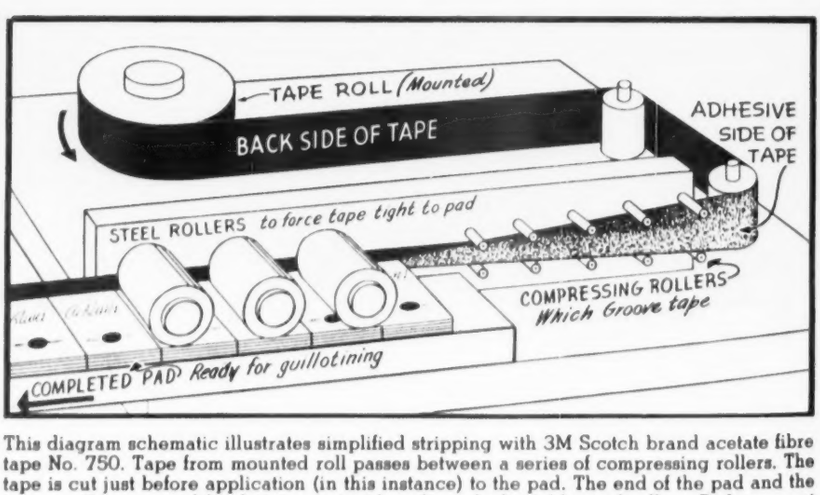
Leather Hand Pads—The GS Safti-Mitt Handpads, Style 1201, are designed for protecting a worker's hands when handling metal sheets, cast printing plates, sharp edged castings, cartons, paper, cases and for other uses where hand injuries are a risk. According to the sponsor, General Scientific Equipment Co., the heavy genuine horsehide pads are adjustable to any size. An adjustable tie string keeps the pad on and facilitates removal. Please mention PEE No. 275 when writing for further details.

Stripping with Scotch Tape

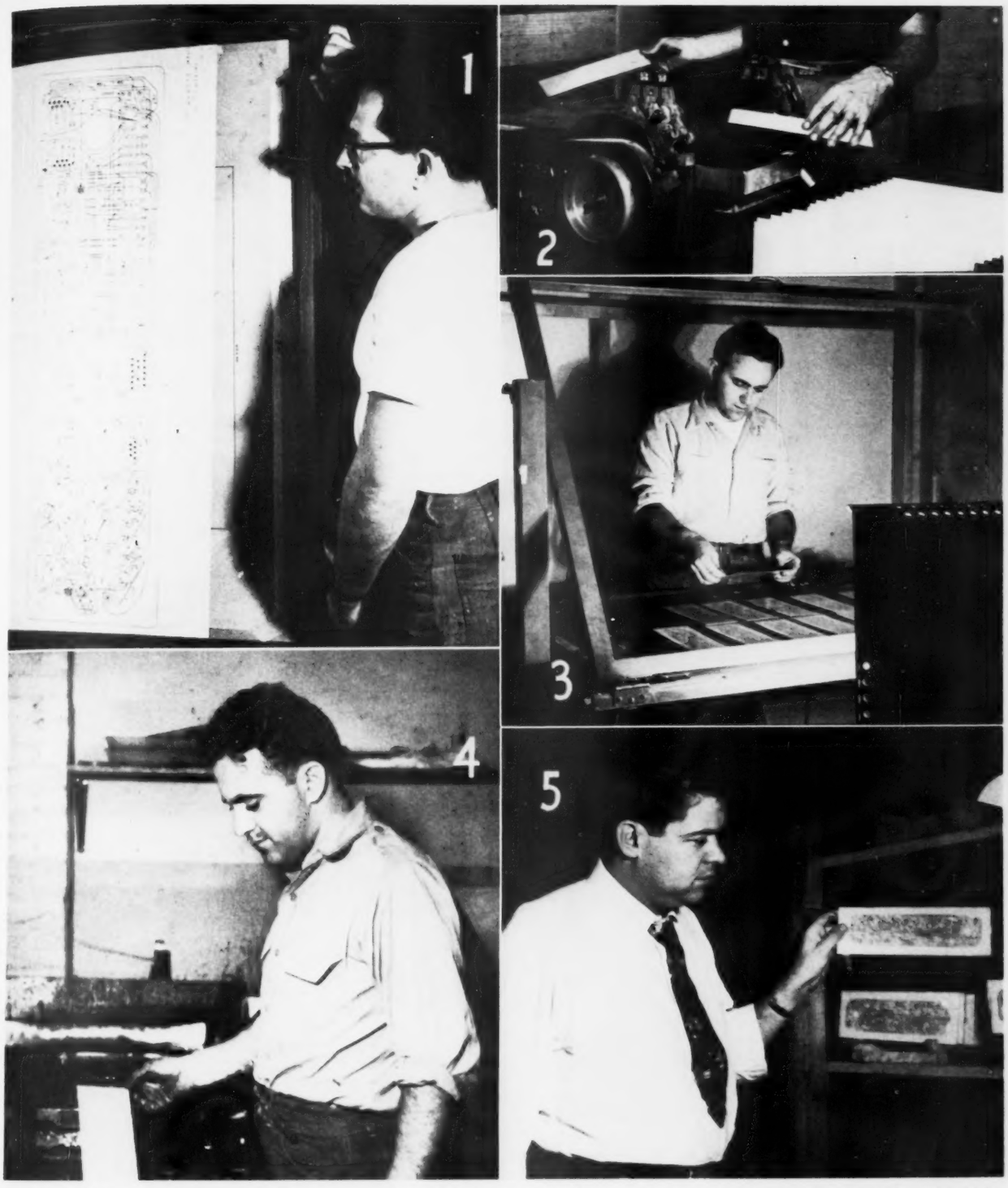
A NEW use for pressure-sensitive tape—that of stripping, has been announced by Minnesota Mining and Mfg. Co. Scotch brand acetate fibre tape No. 750, designed for office edging work, is available for volume production pad-and-book binding operations. It can be used on modified standard stripping equipment. Tests recently conducted with the tape on a modified stripper at Brown & Bigelow, St. Paul calendar and specialty printer, 3M states, resulted as follows:

(1) Tape was ready for immediate use—without noticeable material loss—as soon as threaded through the machine. (2) Tape stuck-at-a-touch without activating. (3) A depleted roll of tape could be replaced quickly. (4) Tape adhered to all surfaces. (5) Occasional imperfections (tape breakaway) could be repaired by running the finger over the tape, pressing it firmly to the pad or book surface. (6) The tape laid flat, and stayed flat without breaking or cracking. (7) The tape was clean to use.

Tape No. 750 is of 4 mil thickness, and is made in standard ¼ in. to 1 in. widths on 2592 in. rolls. Other widths and roll sizes are obtainable. It is available from paper jobbers in brown, black, red, white, and transparent. Blueprints for modifying existing stripping equipment—for use with tape—are available on request. Please mention PEE No. 278 in your request for further information.


TAPE ROLL (Mounted)
BACK SIDE OF TAPE
ADHESIVE SIDE OF TAPE
STEEL ROLLERS to force tape tight to pad
COMPRESSING ROLLERS Which Groove tape
COMPLETED PAD Ready for guillotining

This diagram schematic illustrates simplified stripping with 3M Scotch brand acetate fibre tape No. 750. Tape from mounted roll passes between a series of compressing rollers. The tape is cut just before application (in this instance) to the pad. The end of the pad and the tape are then pressed firmly into contact by a line of adjustable steel rollers. Pads are sent into the machine before being trimmed with a short space being left between each set of pads as they travel into the machine. The uncut pads, stripped with tape, are then stacked and delivered to the paper cutter.



Reproduction Process—Trans-Gel Products, Inc., has reported a process which, it claims, makes possible the reproduction of anything that is photographed, printed, drawn or written onto plastic, metal, wood, glass, leather or any other non-porous surface. Among the uses to which the process may be applied are name plates, instrument scales, schematics and blueprints, permanent instructions, printed circuits, lubrication charts, advertising displays, posters, salesmen's portfolios, documents and photographs.

The steps involved in the process, known as Perma-Stat, are illustrated in the picture layout on this page.

(1.) Negatives are first made from a large master copy of a schematic diagram by ordinary photographic methods. The desired size of the reproduction determines the size of the negative.

(2.) An emulsion, which is a bichromate stabilized gelatin, is applied to the material which is to receive the reproduction by a small roller coating machine of well-known make.

(3.) The negatives are placed against the treated surface of the material in a printing frame and exposed briefly to a carbon arc lamp or a sun lamp. The ultra-violet rays pass through the image in the negative to the gelatin coating causing the image to become dye receptive. It is claimed ordinary daylight, incandescent or fluorescent light do not affect the emulsion.

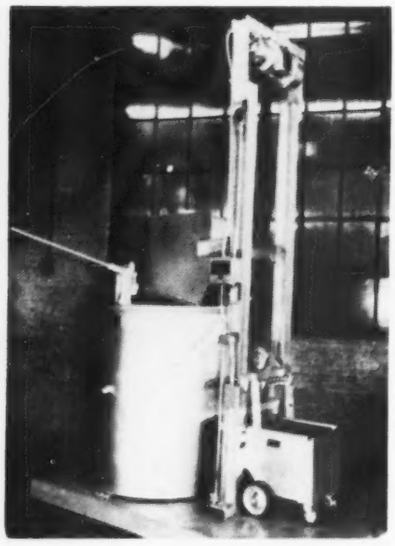
(4.) The material receiving the reproduction is then dipped into the dye of the desired color to be developed. Rinsing in cold water completes the Perma-Stat. Two, three or more colors can be put on the material.

(5.) A group of Perma-Stat reproductions wind up on the drying rack. Sponsor states the emulsion will not chip, fade, crack or peel. It is further claimed the emulsion is impervious to hot or cold water, solvents, fungus growth, etching solutions, and cannot be destroyed by fire if it is reproduced on a non-combustible material.

In writing *Printing Equipment Engineer* for further details about this process, please mention PEE No. 271 in your letter.

Kemp Metal Loader

THE Kemp Metal Loader for type metal remelting pots, states C. M. Kemp Mfg. Co., eliminates hand shoveling of type metal into the metal remelting pot. The overall productive



output of the melting equipment is increased and in most cases permits one operator to keep an ample supply of pigs flowing to the composing room. The specially designed carts are rolled into lifting position by hand from which place they are raised and dumped by the electric hoist. Limit switches prevent operation until the cart is in proper lifting position. The metal loader is available in conjunction with Kemp remelting pots and also can be applied to existing Kemp pots. Overall height is approx. 10 ft. Please mention PEE No. 277 when requesting further information.

Spotting and Coloring Brushes

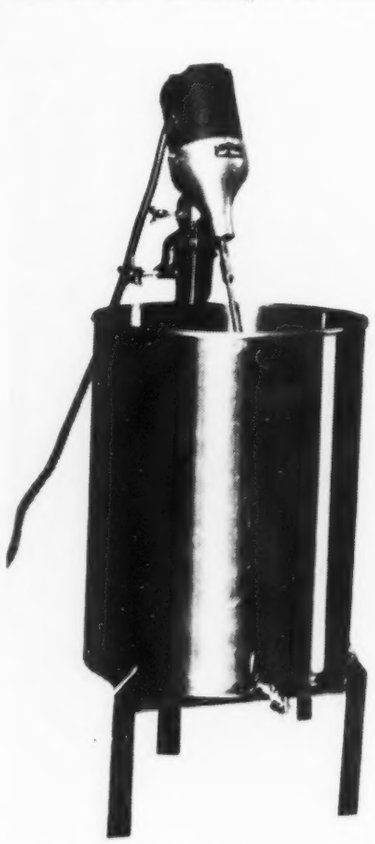
FIVE brushes for spotting and coloring photographic prints have been announced by the Eastman Kodak Co. Four of the camel's hair brushes, known as Kodak Deluxe Spotting and Coloring Brushes, are available in sizes 0, 2, 6 and 8. The No. 0 brush is designed for retouching where fine detail work is essential. Nos. 2 and 6 are suited for Kodak Flexichrome Process work and general photographic coloring purposes, while the No. 8 is adapted to opaquing. The fifth brush, the Kodak Spotting Brush No. 2, is a general purpose tool designed for amateur use. Please mention PEE No. 298 when writing for more details.

Printers' Aprons

THRIFTY Products Co. claims that the True-Flex printers' apron is not affected by most acids or alkalis, oil or grease, is non-flammable, waterproof and midewproof. The True Flex apron may be wiped clean with a damp cloth and is available in black for printers. Sponsor states the apron is made of a specially formulated 0.008 ga. virgin Vinyl material which will withstand cold of 25 deg. below zero without cracking, stiffening or peeling. Hems and bindings are electronically heat sealed. It is reported the heat welded buttonholes will withstand a pull of 300 lbs. Where desired, firm names may be imprinted. When requesting further information from *Printing Equipment Engineer*, please mention PEE No. 291

Photographic Chemical Solution Mixer

A STAINLESS steel tank for mixing and storing photographic chemical solutions is sponsored by Oscar Fisher Co., Inc. Tanks range in size from 10 gal. to 100 gal. A stainless steel triangular post is incorporated in the MT tank to enable mounting of the mixing



View of Fisher Tank for Mixing Photographic Chemical Solutions.

motor. Illustrated is the Fisher MT-50 Tank with a PM-50 Motor Mixer. Stainless steel self-closing spigots are provided. A transparent Lucite float, states sponsor, assures control over aerial oxidation. Float is supported on the surface of the liquid irrespective of the level. Transparency of float makes visible any air bubbles which might collect below its surface. These may be dispersed by spinning the float itself. If you wish to have further information, please mention PEE No. 269 in your request.

Recent Equipment Reports

E. B. Co. Installations

Five recent installations of E.B.Co. 22 in. by 34 in. Single Color Offset Presses have been announced by the Printing Machinery Div. Electric Boat Co. Two presses were installed at the San Antonio Air Material Area, Kelley Air Force Base, Tex., and one press each was installed at: Redfield and Company, Omaha, Nebr.; Control Center, Naval Supply Depot, Mechanicsburg, Pa., and Gartner Printing & Litho Co., Los Angeles, Calif.

Miehle Installations

Miehle Printing Press & Mfg. Co. reports the following recent printing press installations:

No. 29 Offset Presses—A. T. Howard Co., Boston; Gatto Engraving Co., Inc., New York; Racom Processing Corp., Pearl River, N. Y.; Haro Ptg. & Litho Corp., Chicago; Gammatrol Press, Inc., Chicago; E. L. Bosquin Ptg. Co., San Francisco; Majors & Mattoch, San Francisco; Lycoming Ptg. Co., Williamsport, Pa.; Illinois Ptg. Co., Danville, Ill.; Savers Ptg. Co., St. Louis, Mo.; Al Jones Litho Co., San Francisco; Metropolitan Ptg. Co., Huntington, Calif.; Fisher Ptg. Co., Los Angeles; Prudential Ptg. Corp., New York.

No. 41 Single-Color—Ben Franklin Press, Pittsfield, Mass.

No. 70CC—Stone & Forsythe Co., Everett, Mass.; Southern Paper Box Co., Taylorsville, N. C.; Associated Folding Box Co., Boston; American Coating Mills, Elkhart, Ind.

No. 61 SC Offset—U. S. Government Ptg. Office, Washington, D. C.; Multi Colortype Co., Cincinnati, O.

No. 76 SC—Arrow Press, New York; Miles Kimball Co., Oshkosh, Wis.

No. 50 Presses—Chilton Co., Philadelphia; The Telegraph Press, Harrisburg, Pa.

Stripping Device—The Gardner Board & Carton Co., Middletown, O.; American Coating Mills, Elkhart, Ind.; New Haven Pulp & Board Co., New Haven, Conn.; Ohio Boxboard Co., Rittman, O.

New Southworth Service

A new service for users of Southworth Power Corner Cutters has been announced by Robert Colomy, Manager of Southworth's Graphic Arts Div. Users may exchange the complete power unit for a new unit shipped from the factory. To avoid loss of production time, arrangements may be made to purchase the new unit and then turn the old unit in for credit. This service is available through any accredited Southworth dealer, according to Colomy.

R.O.P. Color in Daily Newspapers

By PAUL O. BRANNON*

*Pressroom Supt., Cleveland (O.) Press, A talk delivered at the Pressroom Session of the Great Lakes Newspaper Mechanical Conference, Detroit, January 1952.

THE press equipment at the Cleveland *Press* consists of 32 arch type black and white units, six superimposed color cylinders and eight folders. The layout is four units—folder, four units—folder, through two lines of 16 units each. The unit immediately in front of the folder has a reversible first impression couple which is equipped with a duo ink rail and pump boxes. The second unit in front of folder has the necessary mechanism for double reversing with the second impression having a duo ink rail.

The color cylinders, all of which have duo rails, are located above the second impression of this unit. The color work of this plate cylinder is done from the same blanket that prints the black. This arrangement lends itself readily to the printing of spot color in that none of the black and white capacity is sacrificed for such work.

The distance the sheet travels between printings is 10 in., a definite advantage in maintaining register. The necessity for major clean-ups, in changing to and from color, is reduced to a minimum. It also provides, by changing a lead, flexibility as to position in the paper for color ads. For example, when the unit immediately in front of the folder is working the color sheet can be taken straight in with color appearing on page 3 or any or all corresponding pages. By the use of angle bars one-half the web may be turned to either former which gives more positions.

If the size of the product will permit, the regular first page unit may be dropped and the color lead would carry spot work on page one or corresponding pages. Also, with this same run the color lead may be taken under the folder and brought in against the former showing color on any or all pages of the reverse side of the double spread positions. Again, the sheet may be slit over the unit and one-half carrying color under the folder to either section while the other half goes straight in to become the cover sheet for the opposite section. These positions, of course, would be doubled when running collect. And for all these positions the color is printed from the same plate cylinder.

By not having to disturb the black pump boxes, most of our cleaning is done by the press crews and within the regular work shift. To facilitate clean-up we use ½ in. heavy duty Black & Decker drills with reversible switches. To these we added a right angle extension with a head to fit the clutch coupling on the ink pump box. We also attached racks to the drills, the exact height of the ink pump coupling. This allows the drill to be placed on the floor alongside the ink box for the lower rails where it stays in place with just about the weight of the hand to keep it steady.

For the superimposed color cylinder we attached two short lengths of chain to the cat walk which cradle the drill with no strain on the operator to keep it in alignment with the coupling. The ink motion for this top cylinder is always set up for spot color, eliminating the necessity of any cleaning of black ink and requiring only the disengagement of the slip gear on days when no color is used.

When changing colors of great contrast, we remove the pump box cover and drain plug, attach the drill motor and drive the pump in the reverse direction from which it travels when printing. This draws most of the wrong colored ink from the tubes and the agitation of the pump also hastens draining. When most of the ink has drained from the box approx. 2 qts. of kerosene are poured in. A rag is held over the drain hole while the pump continues to work in reverse. This solvent cuts the color strength and reduces the consistency of the ink to a point that allows it to flow out rapidly. The box is then wiped out and the desired color of ink, for that day, is poured in.

The rotating direction of the drill motor is then changed to force the new ink into the rail. Only a few strokes of the pump are required to rid the tubes and orifices of the old ink and refill them with new ink. The sheet is then brought through the second impression and one side of the cylinder is plated with type high solid plates. One color plate is placed on the opposite side to match the corresponding black plates and by the time the sheets are walked in and the folder adjusted, the rollers and drums are sufficiently clean to start the run. Also, by this time we are able to ascertain, within reasonable limits, how the plates will line-up for register. The time required for this cleaning operation is approx. 15 min. for each press crew.

When only a slight change in shade of the same color is required, we use no solvent but only drain the box and pump in the different ink with any surplus being carried off by the solid plates. Since the first few copies from any press on all runs are counted as spoils, we believe the small amount of waste that might be created by this method is negligible.

Something should be done to discourage those advertisers who constantly demand different shades of the same basic color. This is costly and a ridiculous practice as well. Every time ink is changed, even slightly, some is wasted. Color copy provides eye appeal only. The most casual reader will automatically hesitate for a second look, upon discovering a color ad, while turning the pages of a newspaper. This immediately converts him into, at least, a potential customer for the product advertised, since he may not have seen the ad if done in black and white only.

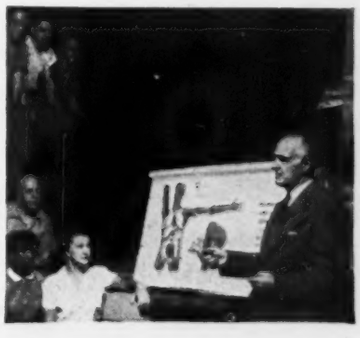
This is true, in most cases, regardless of the color used. Yet some advertisers request and get a certain shade of a certain color as listed in a sample chart by some manufacturer even though no colored illustrations appear in the ad. There are occasions when a specific color can be justified. Some nationally advertised products are more easily identified, and distinguished from similar competitive brands because the container is known to bear some particular shade of a certain hue. But how about a distillery, for example, who sends in copy along with a color swatch showing a specific number of yellow, red, blue or green? We have never seen any whiskey that remotely resembles either color.

All our color plates, including the black, are matched on the cylinders according to the sequence in which they were cast. This insures better register.

When possible, we produce more than one color page in a single issue. Since the union contract provides that one man be added to the crew for each additional plate cylinder operated, but does not limit the number of plates of the same color that may be printed from it, the placing of two or more ads on the same cylinder considerably reduces the production cost per page.

We sometimes carry as many as four different ads, of one color and black, running side by side on one cylinder. And this number, of course, could be doubled when running collect. We may also carry

(*Continued on Page 75*)



On the job!

Our volunteer speakers are saving thousands of lives *today*... in factories and offices, at neighborhood centers and at organization meetings all over this land... showing people what they can do to protect themselves and their families against death from cancer.

For information just telephone the American Cancer Society or address a letter to "Cancer," care of your local Post Office.

American Cancer Society

High Shrinkage Mat Molding Materials

By FERD MIER*

**Stereotype Supt., Detroit* Free Press.

PROBABLY the most controversial subject among stereotypers today is the proper combination or material to mold mats that will produce a page width reduction of 14 to 13/16 in. while retaining quality reproduction. With more and more publications reducing the width of their newsprint rolls it has become necessary to re-evaluate the requirements of the molding combination.

The various materials used in the large variety of molding combinations, and their behavior, is perhaps not thoroughly understood.

The most essential part of the molding combination is, of course, the blanket which provides a resilient cushion for maintaining pressure and securing depth of impression. The most commonly used materials are cork or cork and rubber in combination. Either may be used with different compressional characteristics.

Materials that have high compressibility at low molding pressures and low compressibility at high pressure are best suited for molding of high moisture mats. They have sufficient resistance to insure compression of the mat at the printing surface and still allow necessary space depths.

With high moisture mats the combination must be relied upon to perform the following functions:

(1) To deliver only the space depth required to print cleanly, as determined by the requirements of the pressroom.

(2) To obtain maximum bowl depth without damage to type serifs, italics, or the finer faces.

(3) To obtain maximum compression of the mat at the printing surface in order that the plate surface may be as free from imperfections as possible.

(4) To give even compression on both halftone and type surfaces and nullify drop-out on the plate of halftones and solids.

(5) To allow maximum flexibility of the combination in order that changes may be made to compensate for factors the stereotype department cannot control.

All of these five fundamental points can be met with material available today and in common use on newspapers. The wide range of cork blankets for molding purposes and the use of creepers that have been so prevalent over the past years must give way to fundamental practice if fidelity of reproduction is to be achieved with high shrinkage mats. Fundamentally, the molding combination must be as hard as possible.

Since cork is the most common material used for stereotype molding with the roller type of equipment in general use, its properties are of particular interest to stereotypers.

First of all, cork has the facility of being compressed to approx. 55% of its thickness before it reaches its maximum compression. The recovery time, namely the time required for the material to return to its original dimensions, is extremely short. Cork molding blankets recover 80% of their original thickness immediately when molding pressure is released.

Secondly, cork has the property of being resilient or elastic within the definition of the word. This again is important, due to the nature of the use to which we put the material.

In evaluating the different thicknesses of cork molding material available today we find a range of 1/8 in. to 3/8 in. Each has its particular place and use in the field of stereotyping. Proponents of the various thicknesses and various methods of using them believe they are obtaining optimum results. The diversified combinations in use for molding newspaper mats are conclusive proof of this belief.

With the wider use of the high moisture mat a reconsideration of the molding operation should be made. Mats contain from 10% to 15% more moisture than in previous operations. They, therefore, require less molding pressure to obtain the necessary compression at the printing surface and less bulk in the combination to obtain the required space depth and bowl depth to satisfy pressroom requirements.

Bearing in mind that cork compresses 47% to 55% of its thickness to deliver proper impression in a mat, a 1/4 in. cork utilizes approx. 0.120 in. of its thickness to form space depth and compress the mat at the printing line. In the normal form the space depth is from 0.043 in. to 0.065 in. where high slugs and materials are in use. With low material the depth will be nearly 0.153 in. with the added operation of slugging or filling in these deep spaces to preserve a proper space depth or bridge in the mold. With the thicker corks an over-abundance of free pressure is exerted below the printing surface of the form and a subsequent distortion is set up in the mold as well as the damage done to the type serifs and italics and finer type faces.

For the past two years there have been available cork molding blankets 1/8 in. thick in varying degrees of hardness. This material, when used in conjunction with a steel board and Tingue-Brown foundation blankets fulfills the five fundamental principles just outlined.

Maximum usable compression is 0.062 in. Deep spaces in the form—over 0.065 in—do not need to be slugged as is the case when thicker corks are in use. Space depth is even and the so-called bridges are square and require a minimum of re-enforcement.

Pressures are low in keeping with the high moisture content of the mat. In the past, low moisture content mats required high pressures to obtain the necessary space and bowl depth.

With the 1/8 in. cork, steel board, and foundation blanket as a fundamental combination compression of the mat face at the printing level is obtained. Plate surfaces are of optimum quality consistent with the type of mat in use. Halftone and solid drop-out on the press plate is negligible.

Flexibility is inherent insofar as the top blanket, the foundation material, is obtainable in thicknesses ranging from 0.053 in. to 0.120 in. The thicker the foundation material the sharper and deeper the space depth without loss of bowl depth or compressional characteristics. It is possible to alter the combination by adding a slipboard next to the steel and a thin foundation next to the cork. This has proved to be a particularly good combination for users of heavy mats. Again the fundamental characteristics do not change.

The combination as outlined has been in use at the Detroit *News* since May, 1950, and at the Detroit *Free Press*, where it was developed, since December 1949. Results have been consistent and excellent with all brands of mats. The combination is highly recommended to those papers using or planning to use high moisture mats to obtain maximum form reduction.

Another important factor is the form height makeup. Due to the high moisture content of the mats, halftone compensators are unnecessary. Improved results are obtained by mounting halftones at full 0.920 in. Due to the greater resistance of the solid areas the extra two thousandths overcomes the compression of the base and brings the surface of the halftone to the same level as the type under molding pressure. Column rules should not be over 0.915 in., preferably 0.914 in., particularly where 3 pt. hairline rules are in use.

Due to the molding combination becoming an effective part of the upper cylinder diameter while under pressure, best results can be obtained by having the upper roller completely free, allowing the combination to drive the upper roll in synchronization with the bed travel speed.

While it is impossible to use the same set of techniques in all plants due to the wide variance in equipment and conditions, these few basic fundamentals will be, I hope, of some value in improving your present operation or of some assistance if you are contemplating high moisture operation.

Acquires Color Plant

Acheson Industries, Inc. has acquired the properties of the Peerless Printing Ink Co. and the Synthetic Lacquer & Varnish Co., adjacent plants in Philadelphia. This was announced by Howard A. Acheson, President of Acheson Industries, Inc., 420 Lexington Ave., New York, N. Y. Future plans, it was stated, call for the expansion of Peerless Printing Ink Co. under the guidance of Albert H. Gere, former President and now President of the new subsidiary.

Newspaper Press Packing

By HERMAN WEDEMEYER*

*Pressroom Supt., Detroit Free Press. Address delivered at the Pressroom Session of the Great Lakes Newspaper Mechanical Conference, Detroit, January 1952.

NEWSPAPER press packing has two functions—one is to effect good clean printing and the other, to feed the newsprint properly through the printing couples of the press to the folder. Opinions of what the gauge of press blankets should be may vary, but in the end, the pressman has to pack press cylinders with packing which will print good and feed the newsprint properly through the press. This discussion will deal principally with the matter of thickness gauge of the press blanket and its density or compressibility, and the relation of these two features to one another and to the problems of the pressman in packing press cylinders.

It is not the intention to censure the blanket manufacturers. It must be difficult to manufacture a product such as press blankets made up of various substances such as cork, rubber, fabrics, binder, and maintain in that product a certain resiliency, pliability, resistance to stretch, and all the qualities conducive to good printing. It must also be difficult to produce a gauge and density to within limits of variation of 0.001 in. or 0.002 in. which the pressman demands.

Successful newspaper press operation requires close tolerance in the gauge of the blankets placed on the press. The average range of the total press packing at the time of its compressed printing impression state on its initial run to its compressed printing impression state at the time of its removal as used packing is only approx. 0.012 in. Coupled with this is the fact that the pitch line of the printing cylinders must about divide evenly that 0.012 in. at the time the packing is first placed on the packing cylinders and compressed for printing on the initial run.

In other words, the requirements of a pressman operating a press which (for example) has a packing cylinder of 0.149 in., is a packing having resilient cushion compressible qualities conducive to good printing and under printing impression pressure on its initial run, compressing to a thickness of approx. 0.155 in. It must resolve itself slowly from that point to a compressed thickness of about 0.143 in. during a run of about 18 million impressions.

The blanket manufacturer who could fill these specifications exactly in every batch of blankets he produces would be a genius. Further, we must concede that to accomplish packing press cylinders with packing which will compress under printing impression pressure to a certain point such as described in the foregoing we must consider more than just the overall uncompressed thickness of the packing. The compress values of the packing must also be included in our calculations in order to determine how thick the packing should be which we contemplate placing on the press packing cylinders.

It is my opinion that much of the controversy between blanket suppliers and the pressman, rearding overall thickness of the press blankets could be alleviated if closer correlation existed between the two on the matter of compressibility of the press blankets as well as the overall thickness gauge. Some press blankets commonly used vary in density or compress qualities to the extent that they can cause the pressman as much trouble than that encountered by blankets being off in overall gauge.

For example, here is a set of figures representing the gauge of two sets of press-packing blankets. For purpose of explanation we will call the first, Set A, the second, Set B. Both sets consist of a cork blanket, a rubber blanket and a draw sheet. Both sets are of the same manufacture, and made of the same material.

The cork blanket in both sets gauged exactly 0.072 in. The rubber blanket in both sets gauged exactly 0.071 in. The draw sheets in both sets gauged exactly 0.025 in. The total thickness of the combined packing in both sets is exactly 0.168 in.

Set A, when placed on the press, compressed 0.020 in. under printing impression pressure. Set B compressed 0.013 in. This amounted to 30.5 per cent less than Set A.

The loaded plate cylinder contact with the compressed packing on Set A, when printing impression was applied on the initial run, was 0.001 in. below the pitch line. On Set B, it was 0.006 in. above the pitch line. This applies of course to a press having a packing cylinder cut of 0.149 in.

This was an illustration of variable compress features existing in press blankets on the market, a situation in which even though the pressman uses the utmost exactness in gauging the overall thickness of his blankets prior to placing them on the press, his calculations are upset 30.5 per cent in his efforts to pack press cylinders uniformly.

Another example: in this we will again compare two sets of packing which we will call Set A2 and Set B2. For Set A2 we will use the same packing as described in previous example as Set A, consisting of a cork blanket gauging 0.072 in., a rubber blanket gauging 0.071 in. and a draw sheet gauging 0.025 in. For Set B2, we will use the same cork blanket gauge 0.072 in. used in the previous example, and also the same draw sheet gauge 0.025 in., but for the rubber blanket we will substitute one of exactly the same gauge 0.071 in. as in the previous example, but of a different manufacture. Both sets of packing in this example gauge overall exactly 0.168 in.

Set A2 when placed on press compressed 0.020 in. under printing impression pressure. Set B2 compressed 0.011 in., resulting in a difference of 0.009 in. in press cylinder positions. When impression was set for the initial run of the two sets of packing, on Set A2 the loaded plate cylinder contact with the compressed packing on the packing cylinder was 0.001 in. below the pitch line. On set B2, it was 0.008 in. above the pitch line. We have in this latter example, a situation where 75 per cent of the complete range of the compressed thickness of our blanket during its life on the press is covered by the difference in compressibility or density of the packing we buy. This is a situation or factor hidden from us unless we have means to detect it.

Another example: in this we again used two sets of packing which we called Set A3 and Set B3. These sets consist of a cork blanket, a rubber blanket and a draw sheet in each. In these sets, however, there are four different manufacturers represented. Each of the cork blankets are made by different manufacturers and the same applies to each of the rubber blankets. The draw sheets are of the same manufacture. In both sets the cork blanket gauged exactly 0.071 in., the rubber blankets gauged exactly 0.073 in. and the draw sheets gauged exactly 0.025 in.

The overall total thickness of all the packing in Set A3 gauged 0.169 in. which compressed under printing impression pressure on the initial run to 0.146 in., or 0.003 in. below the pitch line on a press having a cylinder cut of 0.149 in. The overall total thickness of all the packing in Set B3 gauged 0.169 in., which compressed under printing impression pressure on the initial run to 0.158 in., or 0.009 in. above the pitch line on a press having a cylinder cut of 0.149 in.

The comparative difference in the amount of these two sets of packing compressed on the initial application of printing impression pressure is 0.012 in. Couple with this difference in compressibility of our blankets a likely difference of 0.002 in., plus or minus from specified blanket thickness ordered and supplied. We then have a situation where more than the total range of the compressed thickness of our blanket during its life on the press is covered by a combination of overall gauge and compress value variance in the new blankets supplied to us. The principal factor in this situation is the variance in compress values.

That the blanket manufacturers in general are aware of the relationship between the pressmen's press operation problems and the overall press packing thickness and its compress features is in evidence in the foregoing example of two sets of blankets (Sets A3 and B3). Here the product of four different manufacturers was used, which in an overall gauge of 0.169 in. ranges in compress values within a differential of 0.006 in. from a point of 0.003 in. above the pitch line of the press cylinders for which the blankets were intended and supplied by the manufacturers.

Considering that our press packing, to suit the various cuts in packing cyl-

(*Continued on Page 73*)

Have You Smashed An Offset Press Blanket?

(Prepared by and released through Lithographic Technical Foundation)

What To Do About It

WHEN an offset press blanket has been smashed, the pressman usually gums tissue patches on the back to build up the low spot. After a blanket has been in service for a good while, the pressman may find himself putting patches on the patches. At this point, the blanket's usual fate is the rubbish heap. This is an expensive waste. Tests at the Lithographic Technical Foundation have shown that many of these blankets can be restored to an almost like-new condition.

According to LTF, when a blanket is smashed most of the damage is done to the cloth fibers under the rubber. The rubber returns to its original thickness. But the cloth fibers stay compressed. The cure for a smash then, is to bring the fibers back to their original size. Here's the way LTF suggests for you to do this.

Remove the blanket from the press. Scrub the back thoroughly to remove everything that might be on it. Then, if you can, put the entire blanket in some sort of container of water. Let it soak for a day or so. A little wetting agent in the water will help.

After the soaking, hang the blanket up by the clamp bar and let it dry thoroughly. *Be absolutely sure that the blanket is thoroughly dry before you put it back on the press.* LTF's experience has been with blankets up to 41 in. by 54 in. Some develop a slight waviness after being soaked. But this usually smooths out when the blanket is stretched around the cylinder.

If the blanket is too big or if you don't have a container you can use to soak it in, do this: Clean off the back of the blanket as before, and hang it up by the clamp bar. Then soak the back with water using a sponge. Keep the sponge handy. Every hour or so, wet the back of the blanket again. Keep wetting the smashed areas especially. Continue this periodic soaking for a couple of days depending on the condition of the blanket.

LTF's experience has been that either of these treatments will restore the original thickness of the blanket in practically all of the smashed areas. Just how successful it is depends on how badly the blanket was smashed. *The treatment won't work if the rubber is cut or if the cloth fibers under the rubber are torn or shredded.* Damage to this extent might occur if a piece of wood, metal, or thick hard wad of something went between the cylinders.

If you have a bad smash of this sort, you may not be able to bring the entire smashed area back to its original thickness. Then you'd have to use tissue to build up that spot. But, in any case, the amount of build-up paper you'd ordinarily have to put on the back can be sharply reduced.

Try this treatment on all blankets before you throw them away. You'll be surprised at the large number you can save.

Continuous Tone for Pictorial Printing

(By M. S. Kantrowitz, Chairman, Research Committee, Washington (D.C.) Club of Printing House Craftsmen.)

THERE can be no doubt of the desirability of a process which would approach a photographic continuous tone for pictorial printing, such as is obtained by Collotype, which is a slow and costly process involving special techniques.

Such a process, which is possibly adaptable to lithographic reproduction, has been developed through its experimental stages but has not been commercially adopted. This, I am informed, is because the making of the press plate is more difficult and unpredictable than one prepared by the conventional process using a regular halftone screen. It may be called the Bloom Process for making offset press plates, having been patented by Sgt. Fred H. Bloom under patent No. 2,122,404. The image is formed on a light-sensitive, finely grained zinc plate which is designed for use on an offset press.

As in the Collotype or Photogelatine Process of Platemaking, potassium bichromate is the light sensitizing agent. It has been said that the quantity of this irritant salt required for use in the Bloom Process constituted one of its principal objections.

After the image is properly developed and treated to form the reticulated pattern which will reproduce the tonal variations of the original, the plate is printed on the press in the same manner as a regular albumen plate. The contrast of light and shade in the press print is excellent and the unconventional screen pattern very closely resembles that of a Collotype print.

While this process has not been put into practical operation, it is under consideration or some similar technique is being investigated by the research branch of an American manufacturer of printing press equipment.

Dunwody Elected

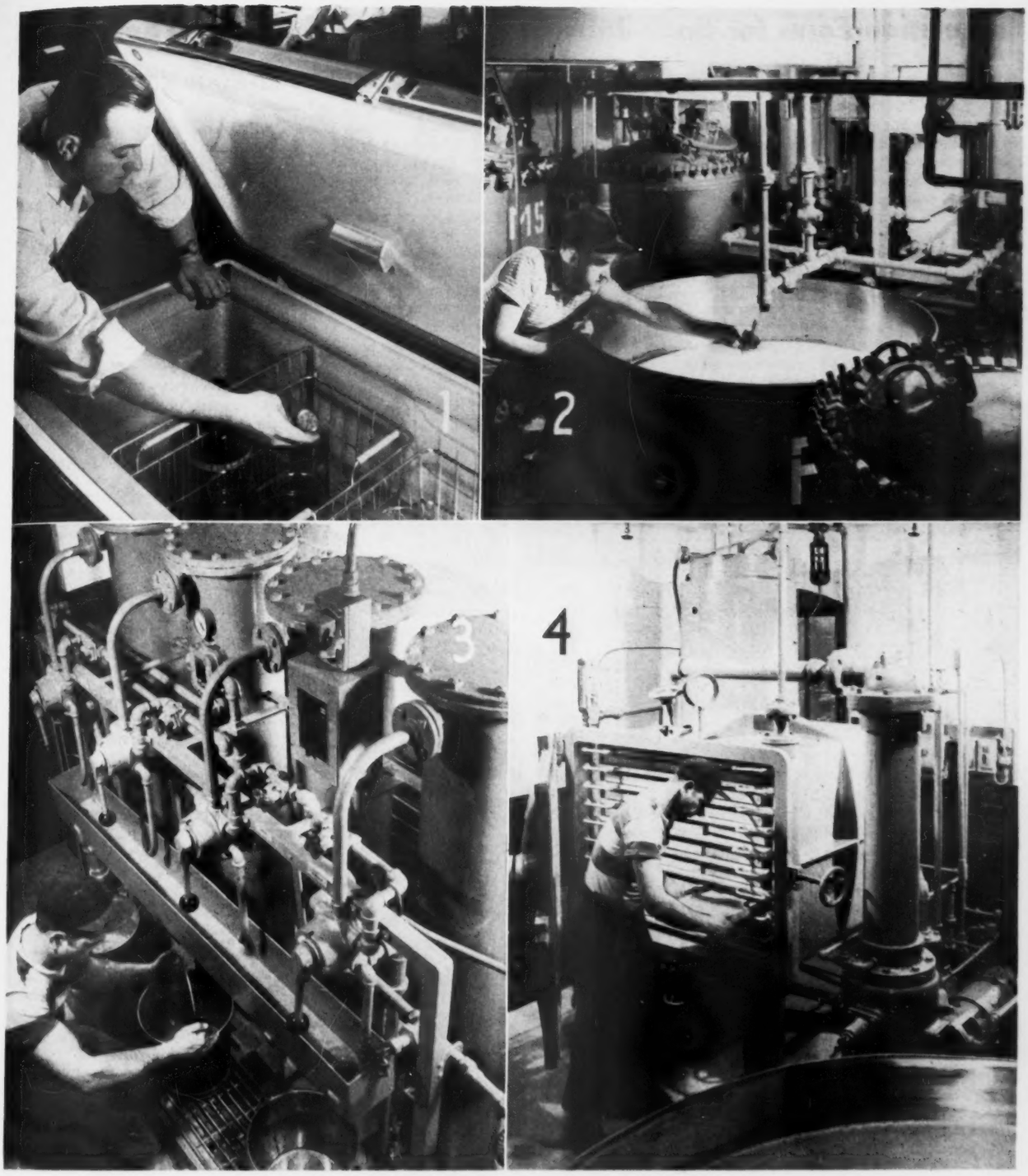
Thomas E. Dunwody, 65, was elected President of the Intl. Printing Pressmen and Assistants' Union in a vote held in 600 United States and Canadian locals on February 20. Dunwody has served as acting president of the union since October 1951. He is Editor of the *American Pressman* and Director of the Technical Trade School for 36 years. President Dunwody will constitutionally take office at the Union's convention in Cincinnati, August 25, and will be the ninth person to serve in this capacity. He joined the union's Technical Trade School, Pressmen's Home, Tenn., in 1912 as letterpress instructor and became offset instructor in 1914. He was appointed Director of the school and Editor of the *American Pressman* in 1916. He inaugurated the magazine, *Specialty Worker*, in January 1950 as Editor-Manager. He is a member of the Cincinnati (O.) Club of Printing House Craftsmen and the National Graphic Arts Education Assoc. Dunwody has also served as director of the union's employment service since 1917. He is widely known as a printing technician, writer and speaker.

THOMAS E. DUNWODY

Three Times Manufacturing Floor Space

THE Chemical Div. of Harris-Seybold Co. was recently moved into a streamlined building at 5308 Blanche Ave., Cleveland 27, O. Production of Harris litho chemicals has been shifted to the new plant, according to A. Stuart Holford, Chemical Sales Mgr., who said: "Chemicals for the lithographic industry must be extremely dependable and uniform to protect large investments in platemaking and press time. From our new equipment, operating under rigid laboratory controls, Harris litho chemicals will be produced in larger volume with the scientific exactness that has been their trade mark."

Harris-Seybold's chemical activities began about 12 years ago, when the late A. S. Harris founded a small research laboratory to find ways of improving lithographic printing quality through better plate and pressroom chemicals. The Chemical Div. itself was formed to market the chemicals. The Harris Chemical Div. is one of the industry's largest producers of lithographic chemicals, especially for deep-etch plates.



Processing Operations Employed in Harris-Seybold's New Chemical Div. Plant, 5308 Blanche Ave., Cleveland 27, Ohio

1.—Control Engineer checks temperature in lab freezer as he prepares to test the quality of the first batch of Hydrogum produced in the Harris-Seybold Chemical Div. plant. All laboratory tests are conducted at a temperature of 20 deg. C., to be sure that standard conditions apply in every case. Harris engineers found that a home-type deep freezer was best suited for bringing lithographic chemicals down to the desired temperature.

2.—Processed and Refined gum solution has sample removed in the new Harris-Seybold Chemical Div. plant. This sample will undergo a rigid quality test in the Harris Control Laboratories. It has been drawn from the outlet of a huge ion exchange column, where gum arabic solution is chemically treated and purified for use in Harris deep etch coatings. In the background are the mixing tanks where Hidensity and Higravity coatings are prepared.

3.—Super-Pure Water for Harris litho chemicals is produced by this "water demineralizer", recently put into operation at Harris-Seybold's new Chemical Div. plant. Water can be purified at 200 gal. per hr. by this unit. All water used directly for producing Harris litho chemicals is passed through the demineralizer, to prevent the undesirable chemical reactions often caused by minerals in water.

4.—Vacuum Drier removes moisture from litho chemicals produced in Harris-Seybold's recently opened Chemical Div. plant. Unless crystalline chemicals are perfectly dry, they will cake up instead of flowing freely. This drier applies heat and vacuum to eliminate water from crystals for use in Harris lithographic etches

Imposition Form for Book Jobs

AN IMPOSITION form used by The Kyle Printing Co., 140 South George St., York, Pa. has proved to be a big help in doing book jobs. The form measures 6 in. by 8 in. and is printed on blue stock. It is perforated and made into pads for easy handling. At the top there is a space for the entrance of the job number, the name of the customer and the number of pages.

Below there are eight columns of numbers arranged in groups of two columns. These numbers run from 1 to 384 so that the form can be used for any book job having up to and including 384 pages. The numbers are arranged to correspond to the layout of pages for a book job.

When a book job comes into this shop the foreman runs a lead pencil line under the last two pages in the job. Thus, if it is a 144 page book job, he would run a pencil line under the numbers 144-143 which are opposite each other in two of the grouped columns. If color is to be used on some of the pages he will circle those pages where color goes, using a colored pencil. These colored pencil marks indicate which pages have color and also what color.

As the different forms are made up and run, the corresponding page numbers are crossed out with pencil on this imposition form. In this way the foreman knows what forms have been run and what forms remain to be run.

The imposition form accompanies the job envelope from the time the first form is locked up until the last form has been run off.

Job No._____ Name_____ Pages____

1	2	97	98	193	194	289	290
4	3	100	99	196	195	292	291
5	6	101	102	197	198	293	294
8	7	104	103	200	199	296	295
9	10	105	106	201	202	297	298
12	11	108	107	204	203	300	299
13	14	109	110	205	206	301	302
16	15	112	111	208	207	304	303
17	18	113	114	209	210	305	306
20	19	116	115	212	211	308	307
21	22	117	118	213	214	309	310
24	23	120	119	216	215	312	311
25	26	121	122	217	218	313	314
28	27	124	123	220	219	316	315
29	30	125	126	221	222	317	318
32	31	128	127	224	223	320	319
33	34	129	130	225	226	321	322
36	35	132	131	228	227	324	323
37	38	133	134	229	230	325	326
40	39	136	135	232	231	328	327
41	42	137	138	233	234	329	330
44	43	140	139	236	235	332	331
45	46	141	142	237	238	333	334
48	47	144	143	240	239	336	335
49	50	145	146	241	242	337	338
52	51	148	147	244	243	340	339
53	54	149	150	245	246	341	342
56	55	152	151	248	247	344	343
57	58	153	154	249	250	345	346
60	59	156	155	252	251	348	347
61	62	157	158	253	254	349	350
64	63	160	159	256	255	352	351
65	66	161	162	257	258	353	354
68	67	164	163	260	259	356	355
69	70	165	166	261	262	357	358
72	71	168	167	264	263	360	359
73	74	169	170	265	266	361	362
76	75	172	171	268	267	364	363
77	78	173	174	269	270	365	366
80	79	176	175	272	271	368	367
81	82	177	178	273	274	369	370
84	83	180	179	276	275	372	371
85	86	181	182	277	278	373	374
88	87	184	183	280	279	376	375
89	90	185	186	281	282	377	378
92	91	188	187	284	283	380	379
93	94	189	190	285	286	381	382
96	95	192	191	288	287	384	383

Mobile Work Bench

By LILLIAN STEMP

A PORTABLE work bench and storage unit, built and used by the maintenance department of the Robert O. Law Co., edition book manufacturers in Chicago, saves return trips to the shop, eliminates tool part losses, improves housekeeping and provides working surfaces for both the electricians and pipefitters.

The unit, constructed of wood, is about 34 in. high, with a table surface 30 in. wide and 64 in. long. It is mounted on a Jack Tung platform truck which has rubber-tired casters with ball bearing wheels, located at the rear, and stationary skid runners in the front. When the unit is to be moved, the maintenance man hooks a detachable truck handle to a coupling attachment and disengages the unit at the next working spot.

The working surface which is also made of wood with metal trim, 1 in. by 1 in. by ⅛ in. angle iron, holds a swivel pipe vise in which can be handled any length or size pipe.

Below is the cabinet with storage areas provided by dividing the unit into two sections. One section is used for plumbing tools and supplies. The other is used for electrical supplies. Both compartments have individual doors. Space on the inside of the doors has been utilized by attaching small bins for the storage of much used items like nails, connections, etc.

When it is necessary to leave the portable unit at lunch time and on other occasions, tools and parts are returned to the cabinet and a connecting rod is inserted between the two doors and the padlock closed. This arrangement requires only one padlock for each of the two divisions.

Retains Publication

The Board of Governors of the International Association of Printing House Craftsmen, Inc., meeting in regular Midwinter Session in Cincinnati, O., February 16-17, 1952, reaffirmed its policy regarding the official publication, *Share Your Knowledge Review*, by unanimously passing the following resolution: "*Resolved*, that the International Board of Governors of the International Association of Printing House Craftsmen, Inc., unanimously reaffirms its policy of maintaining the autonomy of *Share Your Knowledge Review*, and further reaffirms that it will not consider at this time any proposal to combine *Share Your Knowledge Review* with any other publication".

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Road near Route 40. Bidding sta
PEAS NO. 2 CAN 24
CORN NO. 1 CAN 1
U. N. Forces
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and it was also

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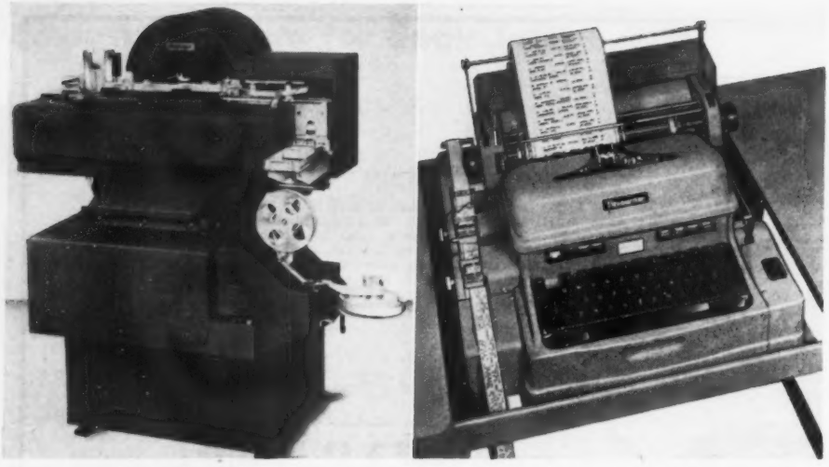

At left is the Automatic Graphotype machine for embossing Addressograph mailing plates. This machine is automatically controlled by a perforated tape which can be produced on the Flexowriter (shown at right). A by-product of the latter machine is a typewritten list of the information to appear on the plates produced by the Graphotype.

Automatic Mail Plate Production

By H. C. WOODLAND* ____

**Methods Dept., Addressograph-Multigraph Corp., Cleveland, O. Address delivered before the Mailroom Session of the Great Lakes Newspaper Mechanical Conference, Detroit, January 1952.*

AN automatic means of producing plates containing names and addresses for use in stamping wrappers in mailing operations of newspapers and magazines, has been developed by Addressograph-Multigraph Corp. The operation is performed by the tape actuated Automatic Graphotype Class 6700 machine.

The machine is controlled by means of a perforated tape. The tape can be produced on two types of tape perforators, the Flexowriter developed by Commercial Controls Corp., and the Class 7700 Tape Perforator manufactured by Teletype Corporation.

The perforated tape carries a six hole code which controls the functions and operations of the machine. In placing the Automatic Graphotype machine in operation, the plate magazine is loaded with blank Addressograph plates, the tape is threaded into the control mechanism and the control button is pushed.

The machine performs the following operations: blank plates are automatically fed from the magazine; plates are automatically embossed with proper character spacings, tabulations and line spacings; type characters are automatically rolled to uniform height; plates are automatically ejected in filing order; and the machine automatically stops through tape control, when tape runs out, or when last plate has left the feed magazine.

The Automatic Graphotype is designed so that one operator can service up to ten machines. The machine operates constantly at maximum speed providing up to 50 per cent greater daily production than the average received from the Class 6300 machine. The Class 6700 machine will be available in approx. one year.

The Flexowriter Model FG simultaneously produces standard typewritten copy and a six hole perforated tape for use in the Automatic Graphotype for embossing Addressograph plates. The basic unit is the Flexowriter itself which is essentially an electric typewriter. The keyboard, in addition to the conventional characters, is equipped with keys for punching special control codes in the tape to actuate the Automatic Graphotype.

It is equipped with a control switch which permits the operator to turn the tape punch on or off at any time to punch selectively into the tape only the specific information desired. This makes possible the composition of an Addressograph plate list as a by-product of an already existing typing operation.

A repeating space key is provided for the registration of tabulated items. Corrections can be made on the tape by the use of a deletion code. The Flexowriter machine can also be used independently for various types of work which are ordinarily done on the typewriter.

The Tape Perforator Class 7700 is a machine designed exclusively for perforating tape to be used in the Automatic Graphotype. Corpy to be composed is inserted in a copyholder located at the top of the machine. The electric keyboard, which is comprised of regular typewriter characters plus required control keys, is synchronized with the tape perforating mechanism. Control keys perforate codes to actuate the Automatic Graphotype, performing such operations as plate feed, carriage return, line spacing, plate ejection, etc.

Corrections can be made by backspacing the tape, depressing the delete key to punch a rejection code over the incorrect perforation and then striking the correct character. This will cause the Automatic Graphotype machine to automatically skip the deletions.

The character space indicating dial shows character count in the line being composed to set up proper tabulations. A rapid repeat key speeds the repetitive punching of spaces for tabulated copy. The Class 7700 Tape Perforator will be available in approx. 12 months.

Craftsmen Bulletin Contest

Harold G. Crankshaw, Chairman of the Intl. Assoc. of Printing House Craftsmen's Club Bulletin Contest, reports that a new record was established this year with 54 clubs entering bulletins in the contest. The judges, Harry L. Gage, Glenn Pagett and A. R. Tommasini selected the Honolulu *Kokua* as the best bulletin among clubs of more than 150 members, the San Francisco *Pi-Box* was awarded second place, while the Chicago *Craftsman* and the Milwaukee-Racine *Craftsman* tied for third place.

Only seven points out of a possible 300 separated the three clubs with less than 150 members that won trophies this year. Utica (N.Y.) *On-the-Beam*, the Fort Wayne (Ind.) *Waynecrafter*, and the Michiana (South Bend, Ind.) *Craftsman* were awarded first, second and third prizes respectively.

Bulletins were scored with points allocated on the following basis: news of next meeting 45, general club news 60, educational features 30, editorial style 30, fitness for club needs 15, general design 45, typography 30, color and illustration 30, and presswork 15, with possible total of 300 points.

Consolidated Expands

The Consolidated Photo Engravers & Lithographers Equipment Co., Div. of Consolidated-Hammer Dry Plate & Film Co., producer of commercial camera equipment, has expanded its manufacturing facilities. The new plant is located at 1112 N. Homan Ave., Chicago, with over 45,000 sq. ft. of floor space. It is being used for the manufacture of cameras and related equipment.

A second plant, Consolidated-Hammer Dry Plate & Film Co., in St. Louis, manufactures commercial film and dry plates. This plant is of modern construction, contains over 75,000 sq. ft. of floor space and is air conditioned and dustproofed.

President Benjamin Sugarman stated the present plant expansion became necessary because of current increased demands by the government and the civilian Graphic Arts field.

Please take a look at your address on the wrapper in which *Printing Equipment Engineer* is sent to you at your place of employment. If it isn't correct, please tell us about it on a postcard.

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by Louis Flader and J. S. Mertle

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By Joseph D. Goggin

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Handbook for Pressmen

BY FRED W. HOCH

This is a practical technical discussion of all platen and cylinder press operations in the commercial pressroom. The language used by the author is *your* language—the text is written simply and pertains to the operations actually preformed in the pressroom.

To give an idea about the contents of the book we quote some of the chapter titles:

Methods of Line-up
Presswork
Makeready, Platen Presses
Makeready, Cylinder Presses
Overlays and Makeready
Close Register
Setting the Rollers
Overcoming Offset
Workups—Cause and Remedy
Slurs—Cause and Remedy
Repairing Plate Batters
Ink
Color Mixing and Matching
Metallic Inks

Some of the more unusual operations to many pressrooms are covered by the author in the following chapters:

Printing Water Color Jobs
Two Colors on One-Color Press
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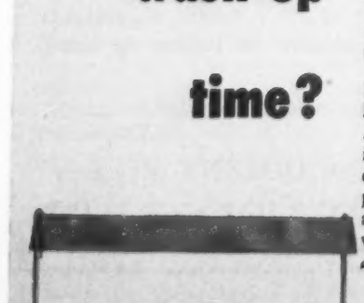

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With a precision-cast-iron or sheet steel top 28" x 96", this Table has—(1) 13 numbered, 30" x 46" letterboards on roller bearings (2) 7 shelves and bin, 21¼" wide, open clear through (3) 4 banks of sloping shelves, open clear through, for 68 double-column galleys. Variable optional equipment available.

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Patents

For The GRAPHIC ARTS

Covering patents issued Jan. 1, Jan. 8, Jan. 15, Jan. 22, Jan. 29, 1952.

All new patents for the Graphic Arts are reported exclusively for Printing Equipment Engineer by Invention, Inc., an industrial patent research organization in Washington, D. C. Invention, Inc., presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing by drawing and page by page, every one of the several hundred new patents issued each week. Printing Equipment Engineer is the only trade publication in its field offering a report based on this complete coverage. For copies of the patents listed here specify the patent numbers and send 25c for each separate patent, or 10c for each trade mark or design patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

Binding, Cutting, Perforating:

2,583,403. BOOKBINDING. Invention provides an improved casing or cover construction which will permit the use of transparent cover members, and the elimination of the usually associated end sheet and fly leaf, whereby matter contained on the first or title page of the book may be made visible through the cover. This page may also be used for fine line and color printing such as cannot be sucessfully applied to the outside surface of the usual cover material. The cover may be of plastic. Invented by Guy B. Wiser, Los Angeles, Calif. Asigned to Marador Corporation, Glendale, Calif. Application January 4, 1947. 8 Claims.

Composing Room:

2,584,039. BREAKUP BANK FOR COMPOSING ROOMS saves labor and money in the operation of breaking up dead type and sorting parts of it for distribution back into the storage case, while discarding the remainder for recasting. The bank includes a work table forming the top of a knee-hole desk structure, galley to the rear of, and partly arranged at a higher level than, the table, receptacles and galleys below the table accessible through openings in the table top. A slidable receptacle for recastable material is preferably mounted on wheels and reciprocable in the knee-hole space to allow the break-up man to sit at his work and in a comfortable uncramped position. Invented by George Muff, Berne, Switzerland. Assigned to Luscher, Leber & Co. A. G., Berne, Switzerland. Application September 22, 1950, in Switzerland March 5, 1949. 4 Claims.

2,583,324. SPACEBAND TOOL is for placing space bands in the space box of a linotype machine or removing same. The tool is formed of a long, thin bar that is flatwise in a vertical plane, one end of the bar affording a long handle and the other end affording a short space band carrier, the upper edge of which is parallel to the upper edge of the handle but spaced below the same. Upper edge of inner end of handle is inclined to the upper edge of carrier which has at its outer end an upstanding fixed jaw. A long movable jaw cooperates with fixed jaw. Upper edge has notches for receiving space bands and a stop against which the thumb of an operator may be rested in operating tool. Invented by George L. Curle,

Minneapolis, Minn. Unassigned. Application May 3, 1948. 1 Claim.

Feeding, Folding, Delivery:

2,580,379. INTERLEAVING APPARATUS is for use with printing presses or other duplicating machines. The slip sheeting apparatus includes a support for a book of slip sheets which comprises means providing a pair of vertically spaced upwardly facing surfaces of limited area. Sucessive sheets of the book have angularly misaligned openings. The means providing the upper of the surfaces are adapted to extend through the opening in the bottom sheet to support the sheets thereabove. The bottom sheet rests on the other surface and means are provided for releasing the bottom sheet. Invented by Richard W. Bailey, Los Angeles, California. Assigned to Milo M. Harding, Los Angeles, California. Application December 29, 1945. 4 Claims.

2,583,506. CONTINUOUS FEEDER for newspaper or other work done on an offset printing press feeds paper sheets, one at a time, to the press. Feeder uses a rotatable feed roll adapted to present a moving cylindrical surface to the upper surface of paper sheets, a stationary retard roll below the feed roll adapted to wipe the under surface of the sheets of paper and spaced from the feed roll a distance sufficient to allow the passage of a single sheet at one time between the two rolls. A linkage operated cam is associated with feed roll for intermittently raising the feed roll from approximate contact with the surface of retard roll. Stop fingers interrupt movement of sheets across the retard roll to prevent passage of paper during the period when feed roll is withdrawn from approximate feeding contact with retard roll. Invented by Frank J. Breman, Chicago, Ill. Unassigned. Application January 25, 1950. 24 Claims.

2,583,580. WEB REGISTER CONTROL SYSTEM. Apparatus can be installed on existing equipment. The apparatus begins to correct for errors as soon as a rate of change of error is detected. The control apparatus is for a printing cylinder operating on a web of paper. It includes devices for continuously sensing the position of the cylinder and the position of the web for rectifying relative displacement between the cylinder and the web as a function of such displacement. The rectifying affect is also a function of the derivatives of such displacement. Invented by John W. Ludwig, New Canaan, Conn. Assigned, by mesne assignments, to Askania Regulator Co., Chicago, Ill. Application January 8, 1947. 23 Claims.

Inks and Related Products:

During the four weeks covered by this report, no patents have been issued pertinent to this heading.

Miscellaneous:

2,580,758. TRANSFER ARRANGEMENT FOR OVERHEAD CONVEYER SYSTEMS is for supplying reels of paper to the magazines of printing presses. It comprises a continuous or closed overhead track supporting a plurality of bogies from certain of which are suspended pivotally mounted elements furnished at one end with a counterweight and at the other end with a hook. Each is adapted to engage a sling passed about a reel and are positioned at points in the length of the continuous overhead track. Additional overhead tracks include a portion extending in a direction parallel with the adjacent portions of the first-mentioned track. The movement of a bogie on a subsidiary track alongside a bogie on the main track is effected by engagement of one of the bogies with an arm provided on the other bogie. Invented by William Gibson, London, England. Fifty percent assigned to Daily Mirror Newspapers Ltd., London, England. Application May 3, 1949; in Great Britain May 4, 1948. 2 Claims.

Platemaking:

2,580,718. ELECTROFORMS are produced by the method of this invention. The steps include subjecting a wax mold having a surface which is not readily wetted by aqueous solutions to treatment by an aqueous solution of an alkylated naphthalene sulphonate as a wetting agent and stannous chloride. The wax mold, after treatment with the aqueous solution and metallic salt, receives a deposit of a layer of silver. Invented by William H. Banks and Patrick B. Upton, London, England. Assigned to The Printing and Allied Trades Research Association, London, England. Application July 29, 1946; in Great Britain August 1, 1945. 1 Claim.

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- PLASTIC MOLDING BLANKETS
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WESEL MANUFACTURING COMPANY: Electric Proof Presses, Flat Routers.
THE MORRISON COMPANY: Composing Saws.

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2,581,220. PLATE STOP MECHANISM FOR STEREOTYPE PLATE REGISTERING AND TRIMMING MACHINES is for registering and trimming curved printing plates and includes an improved plate stop for locating the plate longitudinally of the cylinder that supports it during the registering and trimming operations. The stop does not rotate with the plate and so does not foul the plate and trimming cutter but moves longitudinally with the plate when the plate is adjustably moved to its position of registry. Invented by Paul L. Tollison, North Plainfield, and Charles L. Richards, South Plainfield, N. J. Assigned to Wood Newspaper Machinery Corporation, Plainfield, N. J. Original application April 27, 1948, divided and this application June 9, 1950. 4 Claims.

2,580,723. PRELIMINARY FINISHING MACHINE is for use in finishing electrotypes and includes a table for supporting an electrotype with its face in contact with the table. A series of narrow rollers extend in side by side relation across the width of the table. Each roller is supported for individual movement towward and from the table. The means for accomplishing said movement includes an elongated horizontal lever arm for each roller. There is a weight for each lever arm. Means are provided for slidably mounting each weight on its corresponding lever arm. Means individual to and connecting each lever arm and its roll provide for urging the roll toward the table under the influence of the weight. Invented by Homer L. Bishop, Dayton, Ohio. Unassigned. Application April 18, 1947. 5 Claims.

2,581,718. METHOD OF PREPARING DUPLICATE PLASTIC BACKED PRINTING PLATES consists of forming a metal printing shell and preparing a plastic backing for the shell consisting of an ethly cellulose, castable, plastic with an anthophillitic asbestos filler in an amount such that the thermal coefficient of expansion of the backing approximates the thermal coefficient of expansion of the printing shell. A bonding material is applied to the back face of the printing shell and the plastic backing is superposed over the binding material. The composite assembly is heated, pressed, released, and cooled. The composite assembly is again pressed to level all of the printing surfaces into a common plane. Invented by Roland M. Schaffert and Melvin F. Browning, Columbus, Ohio. Unassigned. Application June 10, 1948. 3 Claims.

2,581,860. APPARATUS FOR MOLDING PRINTING BASE MATERIAL uses a plurality of bars and irons of rectangular cross section which may be employed upon and within the conventional flatbed casting box to thus define a mold into which molten material is poured for the formation of base material, which may be of the same substance from which type is formed in a Linotype machine, or Monotype or Intertype metals may be used. The bases are molded at a uniform constant height whereby when the shell casting is mounted thereon, the total height of the base and shell casting will exactly equal type height, i.e., the height of the row of molded type produced in the Linotype machine. Invented by Noble A. Hunter, Capac, Michigan. Fifty percent assigned to Myrtle M. Hunter, Capac, Michigan. Application June 1, 1949. 1 Claim.

2,583,495. PRINTER'S CHASE is made of light weight magnesium alloy for newspaper work. It is formed of many parts which may be knocked down or disassembled but which, when assembled, has all of the strength and rigidity required for holding a full page of newspaper type in rigid, accurate assembly. The type is held in the chase solely by the clamping of the type slugs between the frame sections of the chase and the frictional engagement with each other and with the frame sections. The lock-up mechanism cooperates with the frame sections to apply spreading pressure in two directions at right angles to each other, locking the sections together. Invented by Floyd C. Roueche, Lon Angeles, Calif. Unassigned. Application June 13, 1949. 2 Claims.

Printing Presses:

2,580,576. METHOD OF REGISTERING MULTICOLOR PRINTING PLATES which are attachable and adjustable on rotary presses having a plurality of color cylinders and an impression cylinder common with the plurality of color cylinders is claimed. The method comprises the placement of transparent sheet members onto some of the color cylinders of a rotary press prior to the placement of the color printing plates. One color printing plate is placed on at least one of the color cylinders not having a transparent sheet member.

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How much time does it take to install a STAR Quadder? This is one question you should ask before you buy, since time out of production adds to the cost of your equipment.

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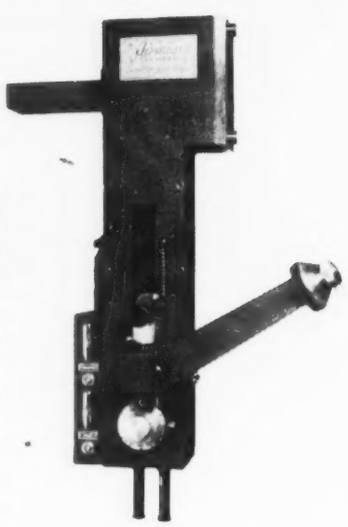

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For Patent Research in the U. S. Patent Office, or a prompt estimate on any type of search, address INVENTION, INC., Munsey Bldg., Washington, D.C.

The rotary press impresses the color indicia onto its impression cylinder. The transparent sheets are lifted from their color cylinders and the color printing plates are placed on the cylinders and rigidly fastened to the cylinders. The transparent sheets are removable above the plates. Invented by Robert R. Myers, Jr., Des Moines, Iowa. Unassigned. Application November 15, 1948. 6 Claims.

2,580,667. WATER MOTION FOR OFFSET PRESSES provides means for transferring liquid, such as water or ink, between a fountain roller and a distributor roller parallel thereto. It comprises a rotatable shaft between and parallel to the fountain roller and distributor roller and a spider on the shaft. A plurality of liquid transfer means on the spider provide for alternate contact with the peripheries of the fountain roller and the distributor roller. Means are provided to alternately accelerate and decelerate the speed of rotation of the shaft to vary the speed with which the transfer means revolves about the axis of the shaft. Invented by Harry W. Faeber, Larchmont, N. Y., and Orville and Lyle V. Dutro, La Canada, Calif. Assigned to Time, Inc., New York, N. Y. Application October 21, 1947. 6 Claims.

2,581,656. BEARING SUPPORT FOR PRINTING PRESSES. In a printing press, the following is claimed: the combination with a cylinder journal and its bearing of a vibration absorbing bushing interposed between the journal and bearing and rotating with the journal. The bushing comprises inner and outer tubular shells and a specially wound strip of thin sheet metal with its successive layers separated by viscous films and being compressed between the shells. Invented by Charles A. Harless, Riverside, Conn. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application April 25, 1947. 2 Claims.

2,581,687. INK ROLLER VIBRATOR is claimed for a printing press having reciprocably mounted ink rollers. The combination comprises a spider having arms adapted to reciprocatingly engage the ink rollers and a universal mounting for the spider to enable it to wobble freely in any direction. An axial projection is rigidly joined to the spider. Means including a rotative driving member have an eccentrically mounted post in engagement with the end of the extension. The rotative member is in alignment with the axis of the coupling for bodily rotation of the end of the projection about the central axis. Invented by Henry L. McWhorter, Chicago, Ill. Assigned to The Goss Printing Press Company, Chicago, Ill. Application October 16, 1947. 9 Claims.

2,581,775. SCREEN PRINTING MACHINE uses a novel squeegee operating mechanism, the stroke of which is adjustable so that printing screens of different areas may be interchangeably used. The machine includes a frame with a work support and a main shaft on which a carrier, adapted to receive a printing screen, oscillates. The carrier oscillates above the frame and moves the printing screen between a lower printing position and a raised position relative to work on the support. The squeegee carriage moves on carrier over printing screen. Carriage is operated by a lever on main shaft. Carrier and carriage are moved in unison. Invented by Louis R. Wade, Los Angeles, Calif. Unassigned. Application September 4, 1948. 4 Claims.

2,582,960. A PRINTING PLATE CATCH is adapted to cooperate with a printing cylinder and a plate mounted thereon and having a marginal lug. The catch comprises a body having a bore for receiving a fastened stud. The catch also has a plate-engaging lip projecting from the body at one side of the bore. The body of the catch has a supporting heel portion projecting downwardly at the side of the bore which is opposite the side from which the lip extends. The lip has a lower lug-engaging surface inclined downwardly as it extends away from the bore. Invented by John Burgess, Camden, N. J. Assigned to The Curtis Publishing Company, Philadelphia, Pa. Application October 2, 1945. 11 Claims.

2,583,375. ELECTRIC PRINTING, for newspaper and other high-speed printing operations, is effected by a rotating cylinder having a part of its surface coated with ink to be transferred to

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Can also be used as scorcher with bearer arms out of position.

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Floor space 31" x 28"
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Model "FC" without timer	$250.00	$275.00
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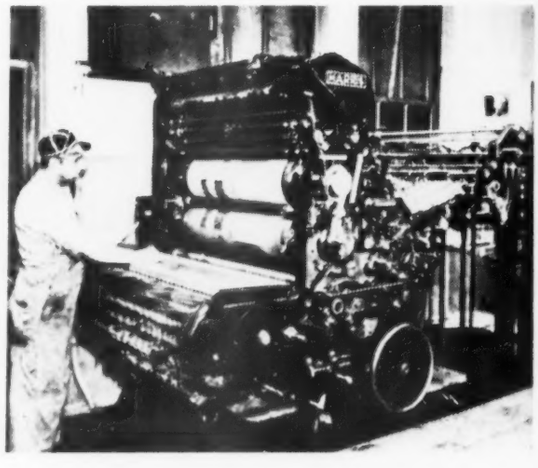
paper. The paper web is moved close to the ink coated surface and an electrostatic field is developed across the space including the inked surface and paper web. Such field is produced by using the rotating cylinder as a negative electrode from which a positive electrode is spaced. Ionizing means comprises a hot platinum filament placed on the opposite side of the paper web from the rotating cylinder. Invented by William J. Hooper, Elsah, Ill. Assigned, by mesne assignments, to William C. Huebner, New York, N. Y. Application September 19, 1945. 17 Claims.

2,,583,639. ROTARY DUCTOR PRINTING PRESSES. Ductor mechanism for transferring liquid from a supply roller to liquid distributing roller comprises a plurality of ductor rollers for transferring the liquid and a rotatable element upon which the ductor rollers are mounted. Pulsating rotary drive means rotate the last named element rapidly during travel of the ductor rollers between the supply and distributing rollers and slowly during movement of the ductor rollers into contact and while in contact with the supply and distributing rollers. Invented by Harry W. Faeber, Larchmont, N. Y., and Orville V. and Lyle Dutro, La Canada, Calif. Assigned to Time, Inc.,, New York, N. Y. Application May 22, 1948. 3 Claims.

2,583,640. SECTIONAL BLADE INK FOUNTAIN FOR PRINTING PRESSES. The inking mechanism comprises an ink fountain having a bottom plate, end walls and a rear wall. A fountain roller is rotatably mounted between the end walls and a plurality of fountain blades are mounted upon the bottom plate. Screw means adjust the blades axially with respect to the fountain roller. A cover plate extends between the end walls and engages the upper surfaces of the blades to form an ink seal. Spring means eliminate back lash. Invented by Harry W. Faeber, Larchmont, N. Y. Assigned to Time, Inc., New York, N. Y. Application February 8, 1949. 8 Claims.

2,583,889. EXPANSIBLE PRINTING CYLINDER FOR ROTARY MULTICOLOR PRINTING provides for exact registry by an adjustment of the printing cylinders during operation. This cylinder has a resilient surface supported by a central axial member and two end plates mounted thereon. A slidable member is mounted on the central axial member, and longitudinally inclined surfaces are arranged symmetrically around the inner periphery of the cylinder surface. Means are mounted on the slidable member for engaging the inclined surface and a central spindle is threaded in the cylinder and in operative connection with slidable member. The spindle may be rotated to displace slidable member axially which radially expands inclined surface and cylinder surface in all directions. Invented by Pancras J. Schoonenberg, Eindhoven, The Netherlands. Unassigned. Application April 29, 1950, in The Netherlands February 17, 1948. 3 Claims.



Press for Long-Run Direct Mail—Pressman Mel Harders of J. R. Watkins Co., Winona, Minn., operates new Harris single color offset press recently installed. Watkins Co. produces broadsides, folders, calendars, catalogs and other pieces for direct mail. Firm also produces labels and office forms, on the six Harris presses in the Watkins plant.

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SHAFTLESS BACKSTAND

Money-consuming downtime on mill roll changing is cut to the bone by the wholly automatic B & S Shaftless Backstand. Here is what Mr. C. Carr Sherman, President of H. P. Smith Paper Co., has to say about this equipment:

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EXECUTIVE Cs

A. E. Horn, President of the A. C. Horn Co., Div. of Sun Chemical Corp., has announced the appointment of B. R. Hale as Vice Pres. in Charge of Products Finishing. Hale, a graduate of Lehigh University, has been associated with the Horn company since 1930 except for four years service as a lieutenant commander with the U. S. Navy.

George R. Hall recently was appointed Assistant to the President of The Allmen Transfer & Moving Co., with headquarters in Cleveland. Announcement was made by President N. Stanley Allmen of the company. The Allmen Co. specializes in complete dismantling, moving and erection of heavy industrial equipment of all kinds, including newspaper and commercial printing plants. Some of the recent jobs accomplished by Allmen were the dismantling, moving and erection of newspaper printing press units from the Cleveland *Plain Dealer* to the new pressroom building of the Cleveland *News* in which 31 units were moved without breakage of any kind; moving a large color press from the *Plain Dealer* to the Greater Buffalo *Press*, Buffalo, N. Y.;

George R. Hall, Assistant to the President of The Allmen Transfer & Moving Co., Cleveland, O.

erecting presses at Toledo (O.) newspapers; dismantling, moving and erecting Hoe presses from Cleveland to the World Color Printing Co. in St. Louis. It is stated by executives that all installation, moving and erecting contracts undertaken by Allmen are fully covered by insurance. For a great many years, Hall has been Maintenance Supt. of the Cleveland *Plain Dealer*. He is well versed in electrical and mechanical details of printing equipment. Hall is married, has one son and lives in Bay Village, a Cleveland suburb.

Appointment of Earl H. Barker to the newly-created post of Mechanical Supt. of the Rochester (N. Y.) *Times-Union* and *Democrat and Chronicle* was announced recently by Don U. Bridge, Associate General Mgr. of the two newspapers. A native of Akron, O., Barker started his newspaper career in 1911 as an apprentice in the composing room of the Akron *Press*, which later became the *Press-Times*. He was associated with the Akron paper for 21 years during which time he advanced to the position of composing room superintendent. In 1931, he joined the Dayton (O.) *News* as superintendent of its composing room. Three years later he moved to the St. Louis *Star-Times* as head of its composing room. The *Star-Times* was purchased in June, 1951, by the St. Louis *Post-Dispatch* and Barker remained to help manage disposal of the *Star-Times* equipment. Present at a dinner meeting held in Rochester recently for Barker were the department heads of the two newspapers. Superintendents from the *Times-Union* included: Edwin A. Merkel, composing room; Adam J. Schreiber, stereotyping; Charles Boller, pressroom; Robert A. Schindel, engraving; and John P. Meagher, mailing. From the *Democrat and Chronicle* were Al Gall, composing room; Warren Lynch, stereotyping; Earl Smith, pressroom; Raymond Birmingham, engraving; and Eiderson Heacock, mailing.

Peter A. Rice, Sales Mgr. of the Printing Machinery Div., Electric Boat Co., recently addressed the Washington (D.C.) Litho Club on the subject of *The Function of the Offset Press*. Rice is also scheduled to speak at the March meetings of the New Haven (Conn.) Club of Printing House Craftsmen and the New York Litho Club.

here's how Rouse REDUCES YOUR TIME COSTS

CUT A FULL GALLEY OF MIXED MEASURES SLUGS IN ONLY 35 SECONDS

Rouse BAND SAW

No more gauge setting! No more reclamping or measuring! That's why the Rouse Band Saw offers you by far the most economical way to accurately cut slug lines to different measures in the shortest possible time. No other machine nor method can even come close to this achievement.

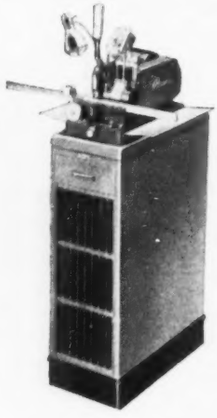
If you operate one or more linecasting machines on variable measure composition, the Rouse Band Saw will do the work of hours in minutes. Expensive time saved will be unusually great in work requiring frequent changes in line measures, such as ad work, catalog runaround work, etc.

NEW ROUSE CATALOG

Write for your copy TODAY!

CUT 1000-1200 ACCURATE MITERS IN ONLY 1 HOUR

Rouse POWER MITERER



If you need miters in either small or large quantities, no other machine nor method can turn out anywhere near as many perfect joining miters from strip material. That's how the Rouse Power Miterer can slash your time costs by doing work in minutes that now takes hours. It quickly pays for itself in expensive time saved.

From the smallest job shop up to the largest plant, only Rouse makes a Power Miterer for every type of use. Can be bought as a bench model or with any other equipment you wish.

Virtually every printing plant in the world uses one or more Rouse Time-Saving Products for Printers

H. B. ROUSE & COMPANY
2214 N. WAYNE AVENUE, CHICAGO 14, ILLINOIS

MITERING MACHINES
LEAD and RULE CUTTERS
COMPOSING STICKS
TYPE GAUGES
SLUG CLIPPERS
BAND SAWS

ROUSE PRODUCTS—THE STANDARD OF THE WORLD FOR 50 YEARS

Flint's Denver Ink Plant—It is expected that the new Denver factory of the Howard Flint Ink Co. will be completed by May 1. Located at 8th and Canosa Sts., the building will have 23,000 sq. ft. floor space, alongside a siding of the Colorado & Southern Railroad. New mills, mixers, and blending equipment are being installed, which will triple the present production capacity of the Flint factory.

E. J. Kiefer, District Sales Mgr. for Sigmund Ullman Co., Div. of Sun Chemical Corp., died on February 3, 1952, at the age of 47. In 1925, Mr. Kiefer joined the staff of the Frank H. Stevens Co. and when this firm was purchased by Sigmund Ullman Co. in 1928, he became Ullman's New York City branch manager. He had served as district sales manager since 1937. He is survived by his widow, two daughters and a son, who live in Manhasset, Long Island, N. Y. Jacob Kiefer, his father, is General Supt. of the Charles Francis Press, New York.

Ferd Voiland, jr., of Topeka, Kas., has been appointed Chairman of the Printing Week Committee of the Intl. Assoc. of Printing House Craftsmen. Appointment was announced at the recent meeting of the Intl. Board in Cincinnati by J. Homer Winkler, President. Voiland is State Printer for Kansas. He's a member of the Topeka Club. He belongs to a number of organizations, including Kiwanis, Masonic Bodies (is a 33 deg. Mason), AIGA, Typographical Union No. 121. He is married and his two daughters are Marimae and Fredrica.

Promotion of six executives of Minnesota Mining & Mfg. Co. was recently announced by company officials. Louis F. Weyand of Detroit, a vice president and member of the board, was promoted to Executive Vice Pres. Robert W. Young, President of Minnesota Mining & Mfg. Intl. Co., was named to the chairmanship of that organization's board. Clarence B. Sampair, vice president of MMM Intl., succeeded Young as President. Sampair also retained his post as a vice president of the parent company. Vice Pres. John A. Borden, General Mgr. of the Cellophane Tape Div., was named sales and marketing consultant for all MMM tapes. The board also elected George W. Swenson and Hubert J. Tierney vice presidents of the parent company.

Herbert Silvius of Sacramento was re-elected President and F. J. Burke Secretary-Treasurer of the Graphic Arts Council of California at a recent statewide meeting. Also re-elected were Executive Committee members Hale Luff, Past President of the Printing Industries Assoc., Inc., of Los Angeles; Ward Williams of Fresno; Oliver Beckwith of Oakland; James Neyenesch of San Diego; Garland Moore of Long Beach; and Silvius and Burke.

EXCELLENT REPRODUCTIONS . . .

When you use BURGESS MATS you can count on line or half-tone reproductions that are beautiful and clean-cut. No fuzzy edges, no blurred lines—every original detail is there!

Burgess Mats are consistently superior because they're laboratory-controlled *in the making*—and tested and retested to assure uniform shrinkage . . . smoother faces . . . greater plasticity.

BURGESS CELLULOSE COMPANY

Manufacturers and Distributors
of Burgess Chrome and Tone-Tex Mats
FREEPORT, ILLINOIS

BURGESS Chrome MATS

R. B. Pennington, jr. Harold Johnson Herbert Johnson

R. B. Pennington, jr., has been appointed Vice Pres. and General Mgr. of the newly formed Merrick Lithograph Co. in Cleveland, it has been announced by F. A. Merrick, President. Located at 2165 Lakeside Ave., the plant and offices occupy 9000 sq. ft. in a new one-story structure. The Merrick Lithograph Co. will specialize in multi-colored displays, packaging and advertising material. The personnel assisting Mr. Pennington in company operations are: Asst. General Mgr. Harold R. Johnson, formerly assistant production executive for American Greeting Publishers, Inc.; Plant Supt. Herbert H. Johnson, formerly superintendent of the offset department of A. S. Gilman, Inc.; Sales Mgr. Tom O. Moles. Other officers of the company are: R. G. Merrick, Treasurer, and P. V. Houriet, secretary.

John H. Feldkamp has been named Ohio and Indiana sales representative of the Geo. H. Morrill Co., Div. of Sun Chemical Corp., according to an announcement made by A. H. Solberg, Morrill's St. Louis Manager. Feldkamp has had experience as a newspaper pressman and in sales in the Graphic Arts field.

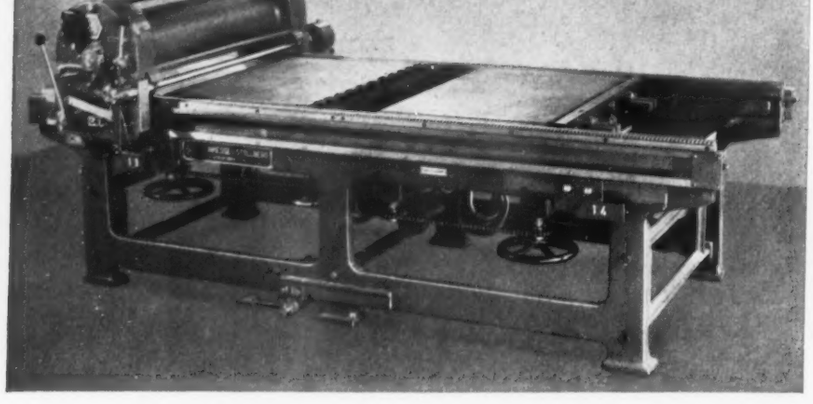
Henry Newman, President of McKenzie Service, Inc., New York, imprinters, finishers and binders for the Graphic Arts, has announced the appointment of DuFine-Kaufman, Inc. as advertising agency. Herbert Kaufman will act as account executive.

Charles E. Foster (left) and John A. Courter (right) have been appointed representatives of Williamson and Company for the Southeastern and Southwestern States respectively. Both men will handle sales and technical service of all Williamson products. Foster, whose territory includes Washington, D. C., and the South, will make his headquarters at the company's home office in Caldwell, N. J. Courter maintains offices in Dallas, Tex., at 1922-D Tarrant Pl., Virginia Manor.

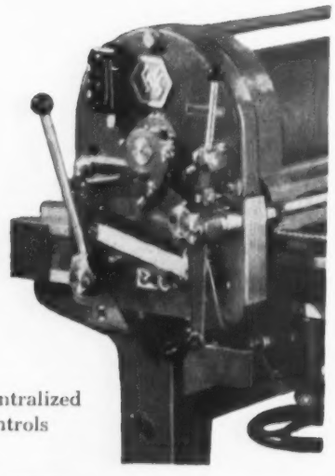
Resign from B&SCo.

The resignations of Joseph S. Scheuermann, Vice President of The Bagley & Sewell Co., and Thomas N. Carter, Director of Engineering, of the Winder Div., have been announced by Mr. Scheuermann. The resignations are effective April 15. Scheuermann was in charge of the Winder project located in New York, N. Y., while Carter was stationed in Watertown, N. Y.

Save Time! Cut Proofing Costs!



S&S Du-Mo Proof Press



Centralized controls

DUPLICATES PRESS CONDITIONS

Check the cylinder on this power-operated proof press with a regular press cylinder and you'll see how closely you can duplicate press work when you proof on an S&S.

Compact, precision-engineered, the S&S Du-Mo features centralized controls for quick, easy operation; dual paper gripper control – feeds from either side; bed rests on four spindles set on heavy springs for easy adjustability.

Modestly priced, the S&S Du-Mo gives you greater proof accuracy, speed and profits.

Write for full details.

Imported by

Amsterdam Continental

Types and Graphic Equipment Inc.

268-276 Fourth Avenue, New York 10, N. Y.

A Good Investment...

the IMPROVED HARTCO SPACEBAND MACHINE and STAR SPACEBANDS

BAD SPACEBANDS with great gobs of metal at casting point cannot be cleaned properly by any machine. BUT—start with a good square surface and daily lubrication with a HARTCO SPACEBAND MACHINE and breakdowns of spaceband edges will be prevented.

Machinists know that rounded edges on spacebands come from hand rubbing on pine boards. The HARTCO SPACEBAND MACHINE rubs the spaceband with graphite between unyielding flat steel surfaces, therefore rounded edges are impossible.

So for a GOOD investment right now get the HARTCO SPACEBAND MACHINE—and if you need spacebands to replace bad ones, order STAR SPACEBANDS.

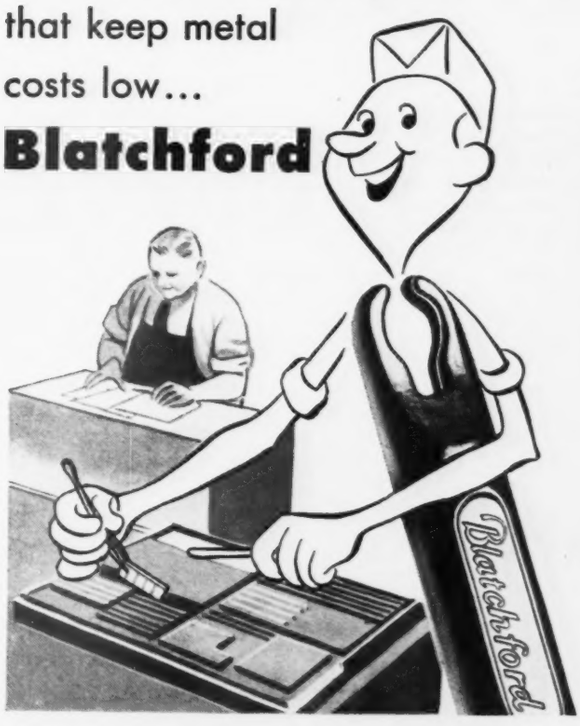
PRECISION
TRADE ★ MARK

LINOTYPE PARTS COMPANY
INCORPORATED
Factory and Main Office
SOUTH HACKENSACK, N. J.
Branch Office: 1327 BROADWAY, KANSAS CITY 6, MO.
CHICAGO • MINNEAPOLIS • DENVER • NEW YORK • BOSTON

Tops in shops

that keep metal costs low...

Blatchford



In the light of today's skyrocketing costs, it will pay you to consider every means to hold expenses down. For example... your metal stock.

Blatchford Metal helps keep operating costs down and production up in these three ways.

IN MACHINE COMPOSITION, you get fewer imperfect casts and greater operating efficiency. Blatchford Metal melts smoothly, flows freely, molds sharply. *You get clean, solid casts.*

IN "STEREO" CASTING, you get less porosity...sounder plates. And Blatchford's fluidity helps you "get" every detail of the mat. *You get a plate true to the mold, time after time.*

IN PRINTING, you get better plate performance, fewer "sinks." Blatchford stands up to rough treatment. *You get long, steady, clean press runs.*

Let Blatchford help you, your skilled staff and your expensive machinery produce to capacity. Buy Blatchford and compare.

➡ **Free chart for re-melt rooms** tells, step by step, how to keep metal "healthy" and *cut dross loss* with Blatchford Type Metal Flux. Just write, Box PE-3, the office nearest you for "Re-melt Chart."

NATIONAL LEAD COMPANY—Atlanta, Baltimore, Chicago, Cincinnati, Cleveland, Dallas, Philadelphia, Pittsburgh, St. Louis; New York: E. W. Blatchford Co.; New England: National Lead Co. of Mass., Boston; Pacific Coast: Morris P. Kirk & Son, Inc., Los Angeles.

Blatchford
is the NATIONAL name for dependable metal...

•Reg. U. S. Pat. Off.

Edward Murphy, formerly of Milprint, Inc., Milwaukee, Wis., is now superintendent of the printing, embossing and coloring department of the Kaiser Aluminum & Chemical Corp., Permanente Foil Plant, Permanente, Calif.

The Board of Directors of the Muirson Label Co., Inc., San Jose, Calif., has announced the election of Robert I. Bentley, jr., to the newly created office of Board Chairman. Succeeding him as President of the firm is George R. Langlois. Bentley served as president of the company for 33 years. George Langlois joined the Muirson organization in 1946 and was serving as executive vice president at the time of his election to the presidency. The following Vice Presidents were also elected: Whitney J. Wright, J. H. Eilers, jr., George E. Fichtner, Sheldon E. Riveroll and Walter E. Riffe.

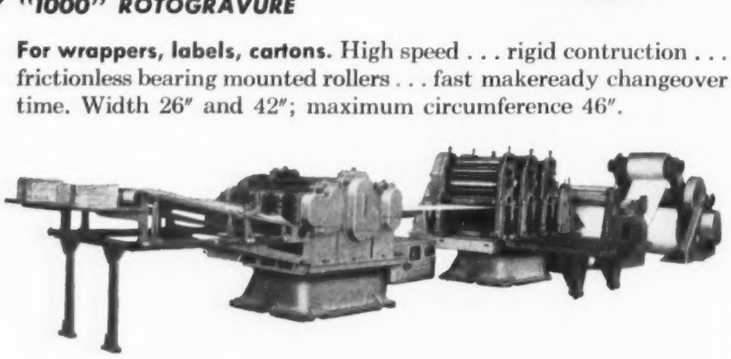
Richard G. Griffoul, Vice Pres. and Works Mgr., was given a farewell dinner by 150 former associates of the Wood Newspaper Machinery Corp., Plainfield, N. J. at the Park Hotel recently. Mr. Griffoul leaves the Wood organization to assume the post of Division Mgr. with Watson Flagg Machine Co., Paterson. Arthur Munson, Chief Engineer of the Wood press Div., presided as toastmaster. Kirk McFarlin, Treasurer, presented Mr. Grifford with a wrist watch from the plant employees and John J. Shea, President, presented him with a set of matched luggage on behalf of the Board of Directors. Other speakers were I. Tornberg, Vice President and Sales Mgr. and Paul L. Tollison, Vice President, who now succeeds Mr. Griffoul as Works Manager.

Richard G. Griffoul receives wrist watch from Kirk McFarlin, Treasurer, Wood Newspaper Machinery Corp., which was presented on behalf of 150 Wood employees.

Two SPERRY PRINTING PRESSES for high production

SPERRY "1000" ROTOGRAVURE

For wrappers, labels, cartons. High speed . . . rigid contruction . . . frictionless bearing mounted rollers . . . fast makeready changeover time. Width 26″ and 42″; maximum circumference 46″.



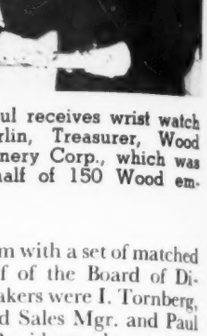
SPERRY ROTARY LETTERPRESS

The versatile press that's best known for making paper milk bottles. Capable of a production rate of a quarter million a day. Easy changeover of printing plates for customer imprinting. Printing cylinder circumference: Maximum 32″; Minimum 16″; 26″ actual printing width.

Formerly manufactured by the Ford Instrument Co., Division of The Sperry Corporation, now handled by the E. G. Staude Division. See our exhibit at the National Packaging Exposition, Atlantic City, April 1-4.

Manufacturers of infolding and straight line carton folding and gluing machines . . . cellophane window applying machines . . . envelope machines . . . milk bottle folding and gluing machines . . . partition slotters . . . butt splicers . . . printing presses.

E. G. STAUDE DIVISION
THE SPERRY CORPORATION
2675 UNIVERSITY AVE. ST. PAUL 4, MINN.



Edw. J. Redmond, announces Carlton Mellick, Vice President of Michle Printing Press & Mfg. Co., has been named sales representative for the Cincinnati (O.) territory. Redmond will cover Southern Ohio and Indiana, as well as the state of Kentucky. His office will be with Nessler-Wagner Co. in Cincinnati.

Arrigo E. Marconetti, 53, president of A. E. Marconetti, Inc., sales agency for Kidder Press Co., died on February 17 in New York. He had become ill while in Europe (as announced in our February issue) and was returned to this country for treatment.

Announcement has been made of the appointment of James C. Steffan as Vice Pres. and Gen. Sales Mgr. of the Chicago Steel & Wire Co. by President Dana Summers. Mr. Steffan has been associated with the Chicago Steel & Wire Co. for the past 15 years.

Robert F. Nelson, Executive Vice Pres., American Type Founders, was decorated with the Navy's Distinguished Public Service Award by Navy Secretary Dan A. Kimball in a recent Pentagon ceremony. The citation gave Nelson credit for "unprecedented records" during World War II in the development and manufacture of "a vast line of gun fire controls, torpedo controls, navigation and other instruments for the Navy." Nelson at the time was vice president in charge of production, personnel and operations of Arma Corporation, Brooklyn, N. Y.

Cleveland Firms Merge

Production facilities of the Caxton Company and the William Feather Co., printing firms located in Cleveland, O., were merged recently. George G. Adomeit, Caxton founder, and William Feather, jr., General Mgr. of the Feather organization, said that personnel of both firms would continue unchanged and that the companies would maintain their separate identities. Both concerns have complete machine and hand composition departments, pressrooms with multicolor equipment and photoengraving facilities. Caxton also maintains commercial photographic and art studios. The Feather company operates a mechanized bindery.

Federated Engineer Talks

The Wisconsin Press Assoc. sponsored a panel on shell casting for the Mechanical Institute of Publishers and Printers. The panel heard Herman L. Smith, Executive Technical Engineer of Federated Metals Div., American Smelting and Refining Co., on Feb. 22, at Wausau, Wis. Smith talked on the properties and melting characteristics of type metals. The program was held in cooperation with the State Board of Vocational and Adult Education.

Tape Recordings Available

The Chicago Club of Printing House Craftsmen has prepared a tape recording of a talk on Craftsmanship and the activities of the International Association given before them recently by Intl. President J. Homer Winkler. Six duplicate tapes of the address are available to local Craftsmen's clubs without charge. Requests should be addressed to the Executive Secretary Pearl E. Oldt, 18 E. Fourth St., Cincinnati 2, O.

Press Packing

(Continued from Page 55)

inders on various presses, must range in overall thickness from about 0.138 in. to 0.185 in. and must of necessity be made of sustances which are pliable, compressible and resilient, it is a credit to the blanket manufacturers that the range of compress values in the blankets they supply us is not greater than the differential of .006 cited here. It is also a credit that the central point of that differential is not further away from the pitch line of our press cylinders.

Bear in mind here, that this is a description of the range of difference in compress values of blankets consisting of corks and rubbers made by various manufacturers, and not by an individual manufacturer. By no means is it my intention that these figures apply to all blanket manufacturers or to all the newspaper press blankets manufactured and on the market as such. Further, some of the 0.012 in. overall difference in compress values cited here as existing in the general supply of press blankets on the market, is no doubt the result of the opinion of one blanket manufacturer compared to another as to just how hard or soft a blanket should be constructed to obtain the best printing results.

However, whatever the cause may be, the fact is that in some instances where three piece packings are used such as corks, rubbers and draw sheets, all made by the same manufacturer and of the same material, there is a variance of compress values as high as 0.007 in. The range of variance in compress values is as high as 0.012 in. Couple with this the fact that efficient newspaper press operation requires that the packing be uniform in both gauge and density from one end of the packing cylinder to the other and from one cylinder to another. It should, also, on its initial run uniformily compress under printing impression pressure to a point of a differential not greater than about 0.0015 in. from a given point above the pitch line of our press packing cylinders. It then becomes clear that to pack press cylinders properly, the percentage of compressibility in the packing in contemplation must be checked and considered in our work of matching blankets for our press cylinders and in our decisions as to the overall thickness of the blankets to be applied.

In the *Free Press* plant, we have our own instrument for checking and registering the compress features of the press

This reflection tells a dramatic story.
There are good reasons for such fidelity.
(1) Edes Gauge Accuracy — *guaranteed* to be the most accurate engravers copper in the world.
(2) Edes Gravure Finish — This exclusive polishing process produces the mirror-like finish shown in the photograph.
You, too, can obtain the ultimate in reproduction by using Edes Gravure Finish Copper.

Edes

The World's Finest Photoengraving Metals

THE EDES MANUFACTURING COMPANY, Plymouth, Mass., U. S. A.

ZINC · COPPER · HARD MATRIX ZINC · TRIPLEMETAL

Ball Bearings for Form Rollers will Modernize Your Press

- Eliminate Dark and Light Streaks from Bouncing Form Rollers
- Require Less Lubrication
- Eliminate the Overheating and Frequent Replacement of the Old-Style Bushings

The ALICO patented ADAPTORS provide ball bearings which are fitted to the existing rubber-covered inking rollers.

The ADAPTORS are clamped in the roller sockets of press after the removal of worn bushings.

Various models available for all makes of presses with sockets either on the inside or outside of press frames.

Here are a Few Users

Greater Buffalo Press . Hoe Color Presses
N. Y. Daily News . . . . Scott Color Press
Charleston Gazette . Goss Unit Type Press
Spokesman Review . Hoe Unit Type Press
Phoenix Gazette . . Scott Unit Type Press
Western Printing & Lithographing Co . . . Hoe Color Press
Woonsocket Call . . . Hoe Simplex Press
Providence Journal . Scott Unit Type Press

ALICO, Inc. WEST SPRINGFIELD, MASS.

MIRACLES in '52
Believe It or Not

"A thin dime still gets you a haircut" . . . as it did in Dan Byers barber shop in Bedford, Pa., in 1885. Dan says: "he never saw any reason to charge more."

● **14 x 20** BAUMFOLDER cost **$1085** —15 years ago. ● Today the LARGER, Finer, Faster "Junior Jet" **17 x 22 . . . $1285.** ($85, initial . . . $40. a month for 30 months.) And BAUMFOLDER users say . . . "they pay for themselves FIFTY TIMES OVER!"

Shakespeare said . . . "don't be the last to lay the old aside". Order YOURS NOW . . . for aluminum and steel so scarce, we may not be able to build many more.

RUSSELL ERNEST BAUM, INC.
615 CHESTNUT ST. • PHILADELPHIA, PA.

END STATIC TROUBLES WITH *PROVED* STATIC CONTROLS

TAKK HIGH SPEED STATIC CONTROLS

THE JOHN HEWSON COMPANY
General Sales Agents
106 Water Street, New York 5, N. Y.

NEWSPAPER PRESSES
•
COMPLETE PLANTS
•
LETTERPRESS and OFFSET
•
BINDERY EQUIPMENT

BEN SHULMAN
ASSOCIATES, INC.
500 FIFTH AVE. • NEW YORK 18, N. Y.
Phone: BRyant 9-1132

blankets we purchase which we have used over a periof of more than 20 years. By or through its use we are able to overcome much of the difficulty encountered ordinarily with off gauge blankets or blankets varying in compress values.

The practice consists simply of checking or gauging the density or compress features of our blankets prior to placing them on the press. Then in conjunction with the overall uncompressed gauge of the blankets we match them in pairs equal in thickness and compress values and of a total packing compressibility consistent with our desire to start actual printing on our compressed packing on its initial run at a point of about 0.006 in. to 0.008 in. above the pitch line of our packing cylinders.

The instrument we use is crude in construction and by no means to be regarded as a sample. We have drawings from which we will build a better one soon. I would like to suggest that any blanket gauge adopted as a common standard instrument to be used by pressmen, blanket manufacturers and the ANPA Research Dept., have embodied in it the instrumentality whereby the compress values of our press blankets can be checked and recorded as well as the overall uncompressed thickness. This would give the pressman the answer to an important question in his calculations and work of packing press cylinders. That question is, to what point in respect to the pitch line of the packing cylinder will the packing in contemplation compress to when it is placed on the press cylinder and printing impression pressure is applied on its initial run?

R. O. P. Color

(Continued from Page 53)

two different colors on this cylinder with the same manning. We have channeled the rollers on this superimposed cylinder to permit the printing, without bleeding, of two separate and distinct colors. The rollers were turned down to a depth of $\frac{1}{32}$ in. and $1\frac{1}{2}$ in. wide, the full oscillation stroke of the ink motion. The cut was not taken, however, in line with the center margin as is sometimes done, but rather to one side of the ring. This enables us to print two full pages of any color in one section and one column less than two pages of a different color in the opposite section.

If it is necessary to switch positions and run a full page against the ring, where we normally print smaller ads, the rollers may be turned end for end placing the cut-out on the opposite side of the press. For three and four color printing we employ the same methods as are outlined above for spot color, the difference being that we put on skeleton crews for makeready. Twevе men and one fly-boy moving from press to press will prepare six presses, including a proof and ready for running, in 3 hrs. time.

Our ink pump boxes are never removed from the rails, and the yellow and blue inks are usually left in their respective boxes indefinitely. If it is found desirable to remove these colors, we drain boxes and pour in sufficient kerosene to cover the pumps. When used again, the oil is drained and the ink pumped through the rail.

We have no leaks in ink boxes since adding one additional bolt on each side of the box to hold it square on the seat.

In getting ready for color, compensators are pre-set as close as possible for register. The column keys on the fountains are turned down to allow only a light flow of ink at the start. This lessens the chance of excessive offset and pipe roller build-up which always occurs if the ink supply is too great. It also helps in determining the tone values of the job.

It is extremely difficult, if not impossible, to match the engravers' proof in high speed printing, even if pulled on newsprint and with ink having a reduced color strength or for that matter with news ink. Some proofs for national advertising are sent in on every conceivable kind of stock except newsprint, and pulled in ink totally unlike that used in newspaper printing, with a memo attached specifying that "Color must be exactly like this."

Even if the proof was pulled on newsprint and with news ink, the very fact that the reverse side of the sheet carries no printing makes a difference in the appearance of the job. Moreover, we cannot carry the same quantity of ink as is shown on the proof.

Prudent use of color is also important.

.176? .147? .165? .152? .140? .169? .180? .145? .129?

What gauge?

Only Your Press and conditions can determine it... but regardless of the gauge required, TINGUE, BROWN has it between .012" and .120"

Check this complete line of press packing which offers the proper gauges or combination of gauges for every press condition.

COMBINO—An extremely durable clean printing laminated blanket. Gauges .062", .083", .093".

"TINGUE" COATED FELT—For those who prefer a softer packing. Gauges .083", .093".

UNCOATED WOOL FELT—Gauges .063", .072", .083".

TOP—Drawsheet is firm, durable, economical and of long life. Gauges .016", .025", .030".

GOLD TYMPAN — Drawsheet — An old favorite for flat bed presses. Gauge .012".

IMPROVED SATISFACTION — A fabric impregnated with "Neoprene" and coated with "Calvaprene." Gauges .024", .026", .030".

STERLING—The latest plastic drawsheet Gauge .025".

CUSHION CORK*—A highly resilient underpacking. Gauges .059" to .085".

TINGUCORK*—Much firmer than "CUSHION CORK" and preferred where precision plates are available. Gauges .032", .055" to .086".

KORKER*—Under Blanket for older type presses or where an unfavorable mechanical condition exists. Gauges .058" to .070".

FOUNDATION—A firm, durable oilproof under packing laminated by duPont with "Neoprene". Gauges .032", .040", .053" to .085", .120".

*Reg. U. S. Pat. Off.

TINGUE, BROWN & CO.

723 E. Washington Blvd., Los Angeles 21, Cal. PRospect 6023
507 Bishop Street, N. W., Atlanta, Ga. ATwood 3864
1227 Wabash Avenue, Chicago 5, Ill. HArrison 7-0083
1765 Carter Avenue, New York 57, N. Y. CYpress 9-8800

Canadian Sales Agents:
ROSS WHITEHEAD & CO., LTD. — MONTREAL, CANADA

Some advertisers have never become aware of the value of white space in their ads, but rather seem to have taken, literally, what Lincoln said when he spoke of the "last full measure" and send in copy that requires some color on every part of the page except the margins.

It is difficult enough, when printing at high speed and with oil vehicled inks, to superimpose three or four colors, of desirable strength, and keep the job clean even with favorable copy and careful spotting of page position. Yet, these loaded ads sometimes appear on the back page where the top and lower halves are pressed together as the paper travels through the folding rollers enroute to the delivery straps.

The next voice we hear is that of the advertiser complaining about excessive offset which he himself, unwittingly, created by his poor selection of copy.

We have heard people dream of the day when R.O.P. color would approximate the high standard of quality achieved by some of our competitive mediums, such as magazines. We can see nothing wrong in hoping to attain this goal. But if this plane is ever reached, changes more revolutionary than the transitions which brought us from the Washington hand press to the modern giants of today will have been made.

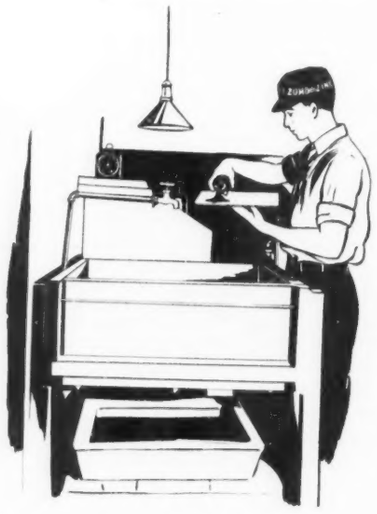
In the meantime we should be realistic, and recognize certain inherent and definite limitations in newspaper printing. Not only those of us who are engaged in the mechanical departments, but management, advertisers, artists, ink and paper manufacturers as well.

The quicker all of us take cognizance of the problems that confront us and act accordingly, the quicker we will consistently produce a quality of work of which we, conceivably, might be proud but, certainly a job of which we will not be ashamed.

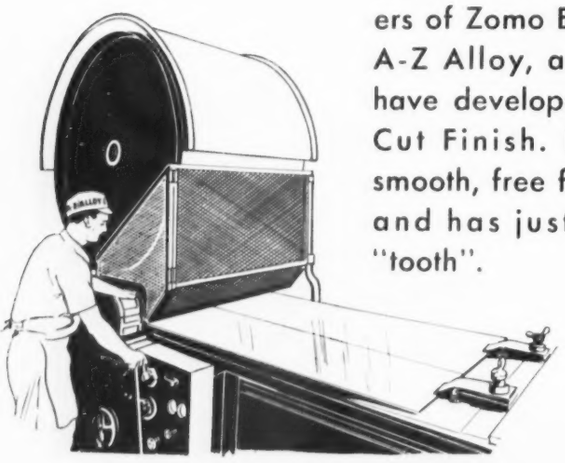
Looking into

YOUR SHOP ..AND OURS

The skill of pouring enamel . . . for a good top . . . is an operation familiar to your craftsman.



And, to provide a flawless surface to hold the sensitive enamel, the makers of Zomo Electric Zinc, A-Z Alloy, and Zomag have developed Machine Cut Finish. It's clean, smooth, free from ridges, and has just the right "tooth".



Machine Cut Finish is just one of the many steps taken in the manufacture of Zomo, A-Z Alloy and Zomag to assure easier handling and better finished plates for you. Specify these metals when ordering from your supplier.

ZOMO ELECTRIC ZINC
A-Z ELECTRIC ALLOY

Gravure Executives

(**Continued from Page 36**)

chairman of a panel held for the packaging group.

At the annual banquet, an engraved scroll was presented to Arthur Dultgen for his outstanding achievements in the development of the gravure process. Last fall, Mr. Dultgen retired from active duty as manager of the New York *Daily News* gravure plant. He originated the Dultgen halftone screen which is widely used particularly in color work. A. E. Winger, Chairman of the Board of Crowell-Collier Pub. Co., did the presentation. Edward J. Volz, President of the Intl. Photoengravers Union and Philip B. Stephens, Business Mgr. of the News Syndicate Co., Inc., also spoke.

The Crowell-Collier Publishing Co. exhibited a Kodachrome movie of operations in its plant at Springfield, O.

Conference Dates

(With Organization Names and Principal Officers)

American Photoengravers Association – 1952 Convention to be held in Chicago, hotel and dates to be announced later. W. K. James, President; Frank J. Schreiber, Executive Secretary, 166 W. Van Buren St., Chicago 4, Ill.

ANPA Mechanical Conference—1952 Conference, Fairmont Hotel, San Francisco, June 9, 10 and 11. Chairman of the Committee, L. J. Griner, Production Manager, Detroit *News;* Manager ANPA Mechanical Dept., Vernon R. Spitaleri, 370 Lexington Ave., New York 17, N. Y.

Fifth District Craftsmen's Conference—1952 Conference, Hotel Statler, Detroit, tentative dates June 20 and 21. President, Robert Knox, Michigan Typesetting Co., 457 W. Fort St., Detroit, Mich.; Secretary-Treasurer, Robert Wolf, Richardson-Taylor-Globe Co., 4501 Mitchell Ave., Cincinnati 32, O.

Gravure Technical Association—Secretary-Treasurer, J. E. Hazel, Room 4800, 30 Rockefeller Plaza, New York 20, N. Y.

Great Lakes Newspaper Mechanical Conference—1953 Conference, Deshler-Wallick Hotel, Columbus, O., January 10-13. President, Harry A. Miller, Mechanical Supt., Dayton (O.) *Daily News;* Secretary-Treas-

"REGAL" MONOCORK

by

New England

This Press Blanket is by far superior to any cork packing that has ever been available to the industry!

We make this claim with no fear of contradiction. Its perfection is attested to by the fact that we have difficulty in keeping up with the demand.

No matter what your reason may be for not having these blankets on your machine, the simple truth is that you are denying yourself the best. Once you learn what "REGAL" has to offer, you too will be a constant repeat user.

YOU BE THE JUDGE!

NEW ENGLAND FIBRE BLANKET COMPANY

164 FREMONT STREET
WORCESTER MASSACHUSETTS
BRANCHES: New York—Chicago—San Francisco—Tulsa

BEVERIDGE

So You Are An *Exacting* Stereotyper?

If you are, be proud of it. Don't ever apologize for demanding a mat that will meet your particular needs. Beveridge, exacting mat makers, likes to talk to exacting stereotypers. And we go to great lengths to fulfill your mat requirements whether for curved newspaper work, multi-cast work or commercial flat work. Yes, you can be sure that succeeding orders will be exactly like the first order regardless of equipment or shrinkage. Get in touch with Beveridge, now!

New Products Division
The Beveridge Paper Company
Indianapolis 4, Indiana

Beveridge Dry Mats

YOU CAN ELIMINATE ALL STATIC

WITH THE HERBERT

Oxy Neutralizer "Cold" Bar

NO ARC!

NO SHOCK!

NO SPARK!

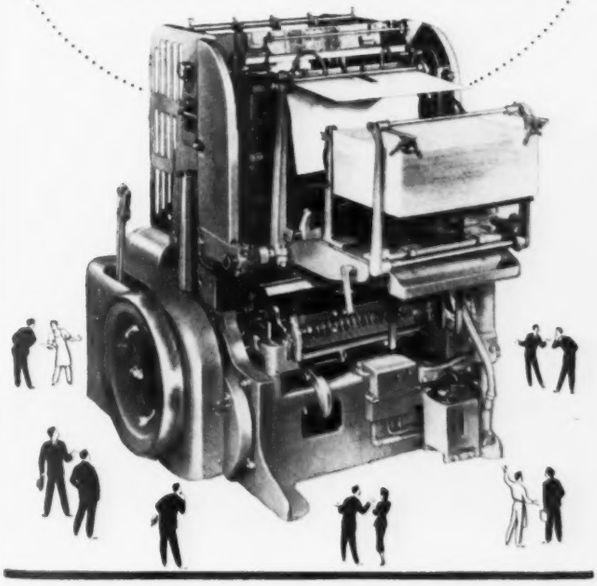
Improve quality of production and increase output—avoid paper jams—improve register and jogging by *complete* static elimination with the *Oxy Neutralizer Cold Bar*—this easily installed, *safe* device is endorsed by leading printers and converters. Beat high production costs by curing "static expense."

Sends us details of any press which causes you trouble. We'll submit recommendations without obligation.

HERBERT PRODUCTS Inc. 74-35 JAMAICA AVE. WOODHAVEN 21, N. Y.

MIEHLE V-50 VERTICAL

the big money-maker for every plant



urer, Don Clark, Stereotype Supt., Grand Rapids (Mich.) *Press.* Co-chairmen, Manufacturers' and Suppliers' Committee, Ray Burgoon, Sales Representative, Mergenthaler Linotype Co., 192 Haldy Ave., Columbus 4, O.; Clarence Seaman, Vice President, Imperial Type Metal Co., 1276 W. Third St., Cleveland 13, 0.

Illinois Newspaper Mechanical Conference — 1952 Conference to be held in Alton, Ill., dates to be announced later. President, James B. Mawdsley, Composing Room Supt., Alton (Ill.) *Evening Telegraph;* Secretary-Treasurer, Wilbur L. Augspurger, Peoria (Ill.) Newspapers, Inc.

Intl. Assoc. Electrotypers & Stereotypers—1952 Convention, Cosmopolitan Hotel, Denver, Colo., October 13, 14, 15 and 16. President, C. C. Barnes, Ft. Wayne Engraving Co., 118-120 W. Superior St., Ft. Wayne 1, Ind.; A. P. Schloegel, Executive Secretary, 701 Leader Bldg., Cleveland 14, O.

International Association of Printing House Craftsmen—1952 Convention, Jefferson Hotel, St. Louis, August 10, 11, 12 and 13. President, J. Homer Winkler, Battelle Memorial Institute, 505 King Ave., Columbus 1, O.; Executive Secretary, Pearl E. Oldt, 18 E. Fourth St., Cincinnati 2, Ohio.

International Graphic Arts Education Association—President, George J. Bilsey, East High School, Cleveland, O.; Educational Director, Fred J. Hartman, 719 Fifteenth St., N. W., Washington 5, D. C.

International Typographic Composition Association—1952 Convention, Hotel Statler, St. Louis, Mo., October 9, 10 and 11. 1953 Convention, Mayflower Hotel, Washington, D. C., September 24, 25 and 26. President, John R. Connell, Connell Typesetting Co., 302 E. Eighth St., Kansas City 6, Mo.; Frank M. Sherman, Executive Director, 1015 Chestnut St., Philadelphia 7, Pa.

ITCA Eastern District Conference — 1952 Conference, Hotel New Yorker, New York, April 25 and 26.

Iowa Daily Newspaper Mechanical Conference — 1952 Conference, Blackhawk Hotel, Davenport, Ia., May 17, 18 and 19. President, Ross DeVine, Superintendent, Davenport (Ia.) *Times;* Secretary-Treasurer, Paul F. Kamler, Mechanical Supt., Clinton (Ia.) *Herald.*

Kansas Newspaper Mechanical Conference — 1952 Conference, Broadview Hotel, Wichita, Kan., September 13 and 14. President, W. A. Blackburn, Herington (Kan.) *Advertiser-Times;* Secretary-Treasurer, Larry Miller, Kansas Press Assoc., 701 Jackson St., Topeka, Kan.

Lithographers National Association — Executive Director, W. Floyd Maxwell, 420 Lexington Ave., New York 17, N. Y.

Mid-Atlantic Mechanical Conference — 1952 Conference, Bellevue Stratford Hotel, Philadelphia, March 20, 21 and 22. Jointly sponsored by the New Jersey Press Assoc. and the Pennsylvania Newspaper Publishers Assoc. Conference Director, Theodore A. Serrill, PNPA General Mgr., 209 Telegraph Bldg., Harrisburg, Pa.

Missouri Newspaper Mechanical Conference—1952 meeting to be held in Kansas City, Mo., hotel and dates to be announced later. President, Mike Creasy, Composing Room Supt., Columbia (Mo.) *Tribune;* Secretary-Treasurer, O. K. Hammitt, Mechanical Supt., Moberly (Mo.) *Monitor-Index.*

National Association of Litho Clubs — 1952 Convention will be held in Phila-

Fire Facts

(Abstracted from an address *Fire Prevention in the Printing Business* delivered before the 32nd Annual Convention of the Intl. Assoc. of Printing House Craftsmen in Boston, August 1951, by Edward N. Montgomery, Deputy Chief in Charge, Fire Prevention Div., Boston Fire Dept.)

DO YOU know that printing processes are considered hazardous business in fire prevention circles? Do you know that about 60 per cent of the printers who have serious fires never go back into business? Do you know that the salvage rate in your establishments is very low? You are operating a most hazardous business and one which is responsible for a fairly large proportion of the $700 million attributed to fire loss in America last year.

Why do I Like Imperial ?

Ask the router! Imperial not only etches the way good zinc should but--the router can work up close without the metal chipping or breaking away.

With Imperial Register-Redibak both etcher and router are pleased with the final result.

Imperial Zinc

A Product of

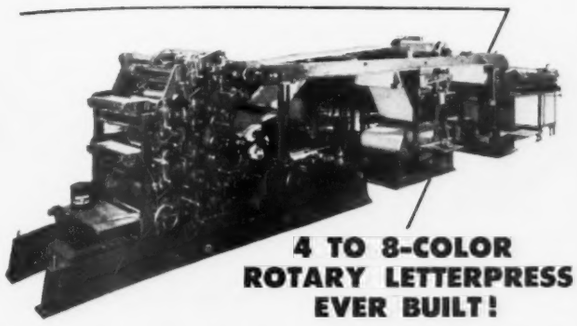
IMPERIAL TYPE METAL COMPANY

SERVING THE GRAPHIC ARTS Exclusively

PHILADELPHIA 4 • NEW YORK 7 • CHICAGO 50

In Canada: LATIMER, LIMITED, TORONTO 2B

EASIEST TO OPERATE



4 TO 8-COLOR ROTARY LETTERPRESS EVER BUILT!

Plate cylinders of Hess & Barker's Rotary Letterpress are quickly, easily accessible with the turn of a hand wheel. Registering plates is quick, easy, accurate because of grooved plate cylinders. Tension on web is automatic, no compensation needed between colors. Because of the *special* Hess & Barker fountain, fountain setting is easy, positive and full color is held throughout the entire job. Feeds from a roll. Delivers in a rewound roll at the rate of 500 feet per minute or sheets at the rate of 10,000 per hour.

SEND FOR *NEW* BOOKLET

IT IS FREE ABSOLUTELY

HESS & BARKER

Printing Press and Equipment Manufacturers

212-22 SOUTH DARIEN ST. PHILA. 7, PA.

Telephone: PE nnypacker 5-4070

LASTING IMPRESSIONS

because . . .

Every minute detail of line and halftone is faithfully reproduced.

WOOD FLONG CORPORATION
HOOSICK FALLS, N. Y.
NEW YORK CITY OFFICE:
551 FIFTH AVENUE, NEW YORK 17, N. Y.

JUSTRITE

Only JUSTRITE* has SAFETY CANS with All These Features!

For FAST, EASY & SAFE HANDLING of all flammable liquids.

Patented "Pouring Lip" reduces spilling. Swinging handle balances load . . . makes pouring easier on 2, 3 and 5 gallon sizes. Trigger handle for one hand operation on 1 Pt. to 1 Gal. sizes. Spring-closing spout cap. Labeled by Underwriters' Labs. and Factory Mutual.

FLEXIBLE HOSE ATTACHMENT

for faster, easier pouring.

Easily attached to any ½ gal. or larger JUSTRITE Safety Can. 9½ inches long, spark proof brass cup and tip. No. 1088, $2.80.

*JUSTRITE . . . world's leading manufacturer of Oily Waste Cans, Safety Cans and Safety Flashlights.

JUSTRITE MANUFACTURING CO.

FREE CATALOG
Write Dept. P E E
2061 N. Southport
CHICAGO 14, ILL.

tailor made numbers

There's no need for such a fancy 7 in today's printing, but it is necessary to use the *right* numbering machine on your printing equipment.

Cam actuated, this parallel rotary numbering machine—designed for a modern rotary press—prints a line of numbers parallel to the impression cylinder. In a one-piece curved-base steel frame, the rugged numbering wheels, equipped with heavy-duty ratchets, are capable of highest press speeds. Clarity is assured by the custom-curved printing faces of all numbers, conforming to the curvature of the cylinder. And you can save set-up time, eliminate mounting-ring adapters by using the economical Wetter QUIK-LOK clamp base. Send for folder today.

Number it Better with a Wetter

8348

WETTER NUMBERING MACHINE CO.
ATLANTIC AVENUE & LOGAN STREET • BROOKLYN 8, N. Y.
SOLD BY ALL DEALERS AND BRANCHES OF A. T. F., INC.

Hey Boy! Hold up on that Lubricating

That's good advice unless he's using ALBANY grease and oils. There is a difference in lubricants for presses as well as other printing machinery. One grease is not just as good as another for this work. ALBANY TALLOW lubricants are three times as effective as ordinary lubricants—made that way particularly for printing equipment lubrication. Because ALBANY has a controlled melting point, bearings can be fed as required.

Thousands of printing plants standardize on ALBANY lubrication, particularly for their presses. To really experience the difference in lubricants, try the following: Use ALBANY GREASE NO. 3 for presses equipped with grease cups . . . ALBANY SOFT PRESSURE GREASE for those equipped with pressure fittings. If yours is an oil-lubricated press, we recommend ALBANY VISCOUS PRESS OIL. And for gears, cams, chain drive—all types of presses—use ALBANY LUBRICANT NO. 93. If you're looking for a smoother press operation, longer life of moving parts, switch to ALBANY, the lubricants made for printing equipment.

Write today for Service Bulletin No. 10.

ADAM COOK'S SONS, INC.
Mfrs. of Albany Lubricating Products
LINDEN, NEW JERSEY

delphia, hotel and dates to be announced later. President, Anthony Capello, 265 Rocklyn Rd., Upper Darby, Pa.; Secretary, Joseph H. Winterburg, Phillips & Jacobs Co., 620 Race St., Philadelphia, Pa.

National Association of Photo-Lithographers—Executive Vice President, Walter E. Soderstrom, 317 West 45th St., New York 19, N. Y.

National Printing Equipment Association, Inc.—Place and time of 1952 annual meeting to be announced later. President, Fred S. Tipson, T. W. & C. B. Sheridan Co., 129 Lafayette St., New York 13, N. Y.; James E. Bennet, Secretary, 140 Nassau St., New York 7, N. Y.

New England Mechanical Conference — President, Howard J. Mehigan, Stereotype Supt. Bridgeport (Conn.) *Herald;* Secretary-Treasurer, Walter C. Crighton, Comp. Room Supt., New London (Conn.) *Day.*

Northwest Mechanical Conference — 1952 Conference, Hotel Duluth, Duluth, Minn., September 20, 21 and 22. President, John Breen, Mechanical Supt., Duluth (Minn.) *Herald* and *News-Tribune;* Secretary-Treasurer, Ralph Carson, Dunwoody Industrial Institute, Minneapolis, Minn.

Pacific Mechanical Conference—1952 Conference will be held in conjunction with ANPA Mechanical Conference at Fairmont Hotel, San Francisco, June 9, 10 and 11. President, Clyde Bowen, *Wall Street Journal,* San Francisco; Secretary for the North, Edw. N. Conley, color press foreman, San Francisco *Chronicle;* Secretary for the South, Fred J. Moyer, Los Angeles *Daily News.*

Printing Industry of America—1952 Convention, Chase Hotel, St. Louis, October 13-16. President, Arthur A. Wetzel, Wetzel Brothers, 444 N. Broadway, Milwaukee 2, Wis.; James R. Brackett, General Manager, 719 Fifteenth St., N. W., Washington, D. C.

Research and Engineering Council of the *Graphic Arts Industry, Inc.* — President, Frank F. Pfeiffer, Reynolds & Reynolds Co., 800 Germantown Ave., Dayton, O.; Official Headquarters, Bernard Taymans, 719 Fifteenth St., N. W., Washington 5, D. C.

Screen Process Printing Association — 1952 Convention to be held in Chicago, dates and hotel to be announced later.

(Continued on Page 84)

RICHARDS' "Electromatic" Efficiency Plus

A HEAVY DUTY SAW
For Stereotypers—Electrotypers —Photo Engravers.
PRECISION GAUGES
Instant change to SAW-TRIM
J. A. RICHARDS CO.
Kalamazoo, Michigan

Typographic Numbering Machine

By Wm. Herman Lichter

What to do when numbering machines don't function properly is clearly explained in this book. A part by part explanation of normal operation of the machine is presented by a well known authority. This book is written for the man who must handle numbering machines in the plant. In addition to the parts explanations, the author tells how to care for the machines. What to do when daily shop problems arise. Included is the secret of skip wheel numbering with suggestions on proper care of the machine.

Consists of 132 pages, well illustrated; size 5¼ in. by 7 in. Semi-concealed binding comb.

Price $3.50 per copy
(Plus 25c postage and handling charge)

Because of narrow handling margin, please send remittance with your order to

PRINTING EQUIPMENT ENGINEER
1276 W. Third St. Cleveland 13, O.

CHAS. T. MAIN, INC.

CONSULTING ENGINEERS

Layouts • Designs • Specifications
and Engineering Supervision

NEWSPAPER AND PRINTING PLANTS

Structural, Mechanical and Electrical Engineering

80 Federal Street **Boston 10, Mass.**

The R & B
EXTENSION DELIVERIES
for MIEHLE, BABCOCK, PREMIER and other presses
•
AUTOMATIC PAPER LIFTS
•
Special purpose equipment for the Graphic Arts Industry
CONSULT US ON YOUR PARTICULAR PROBLEM

THE RATHBUN & BIRD COMPANY, INC.
DESIGNERS AND MANUFACTURERS • FOUNDED 1898
DEPT. PE 379 WEST BROADWAY NEW YORK 12 N. Y.

DON'T THROW AWAY COSTLY MATS

Pat. Pend.

The Align-A-Mat

is guaranteed to restore alignment on mats (costing 18c and up) normally discarded as useless. Especially helpful when sorting up good fonts with new mats. Will keep these in perfect alignment constantly.

The New York Times, New York Herald Tribune, Philadelphia Inquirer, Hearst papers, Condé Nast, Publishers Printing Co., typographers, trade plants, printers throughout the country have acclaimed this invention as a real MONEY and TIME saver.

Please write for descriptive literature.

FISK INDUSTRIES, 130 W. 46th ST., N. Y. 19, N. Y.

UNTIL WE RE-EQUIP . . . AND AFTER

"With the big papers we are getting out and the old equipment we are doing it with, I wouldn't want to make any change in mats," protested the stereo foreman.

"Certified mats really save us time and they are uniform in quality, so we don't add any mat troubles to our molding and casting problems."

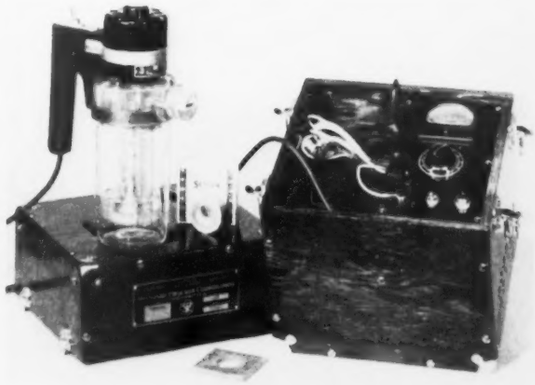
"So you think we should postpone any mat change until we re-equip?"

"Yes! and if you want the new stuff to look good, you'll stay with Certifieds."

For dependable stereotyping, rely on Certified Mats

Certified DRY MATS

CERTIFIED DRY MAT CORPORATION, 9 Rockefeller Plaza, Dept. M, New York 20, N. Y.



ROTOGRAVURE

PUMP TYPE CYLINDER SPOT PLATER

(Patent Pending)

SAVE COPPER • SAVE TIME

Don't grind off and replate entire cylinder to repair small damaged areas. USE STANDARD PROCESS PUMP TYPE SPOT PLATER!

COMPLETELY FILLS TYPE SECTION 1" long x ¼" wide on a rotogravure cylinder with electrolytically plated copper in 7 to 9 minutes! Base copper or Ballard shell imperfections repaired rapidly by single or successive platings! After handfinishing repaired section, there is no structural variation of copper in or around fill.

MACHINE IS A SELF-CONTAINED, PORTABLE UNIT; housed in a compact reinforced plywood carrying case. Machine consists of plater with motor driven centrifugal pump which has stainless steel impeller and lucite housing; also 6 volt rectifier; fuse protected ammeter; variable resistor amperage control; and reversing switch. Includes roll of pressure sensitive plastic tape and rubber mask for centering and taping over area to be plated.

Machine designed to use standard plating solution of copper sulphate, sulphuric acid and operates on 110 volt, AC current.

STANDARD PROCESS CORPORATION

Manufacturing Gravure Equipment & Supplies

2704 W. Roscoe Street • Chicago 18, Ill.

THE

MONOMELT COMPANY

THE MONOMELT

THE PLANE-O-PLATE

THE HYDRO-CASTER

MONOMELT POWER SHEARS

MONOMELT MOLDING PRESSES

PLASTIC PLATE CURVER

VINYLITE AND ELECTROTYPERS SUPPLIES

BAKELITE MATRIX (Processed by Monomelt)

1611 N. E. Polk St.
Minneapolis, Minn.

CHECK ON YOUR SUPPLY OF BOOTH'S ZINK CUT CEMENT

We suggest that the hundreds of users of BOOTH'S ZINK CUT CEMENT check on their supply right now. If you are low, get your order in now for this outstanding cut cement for mounting cuts and solidifying type elements for standing ads. If you have never used this famous cut cement, try it. You'll find it mounts cuts quicker and holds them tighter . . . in use all over the country by leading plants.

Prices: 75c per tube, $6.00 per dozen in the United States.

E. A. BOOTH RUBBER CO.
2855 Scarboro Road
Cleveland Heights, Ohio

Colors, Slits & Rewinds Paper

On the job conversion makes it possible to reduce inventory—Save upcharges for colors and penalties for narrow rolls.

Solves the problem of obtaining groundwood and newsprint in colors.

PUGLISI-DUTRO, INC.
1206 Maple Avenue
Los Angeles 15, Calif.

MAIL COUPON FOR INFORMATION

Please send further information on the DUTRO COLORVERTER

_____
_____
_____ P.E.

Discussing future plans for the School of Graphic Arts at Midwestern University, Wichita Falls, Tex., are, from left to right: James G. Sellers, Instructor of Presswork and Imposition; Louis H. Dobbs, Director of Graphic Arts; and Herbert R. Miller, Supt. of Printing and instructor of newspaper and job makeup, stereotyping and bindery work.

Texas College Offers Graphic Arts Courses

Midwestern University, Wichita Falls, Tex., has undertaken a Graphic Arts program designed to train students for entering the printing industry as linecasting machine operators, pressmen, floormen, shop foremen and teachers of printing. Courses of study include elementary printing, Linotype operation, presswork, printing plant layout, estimating and production problems, use of color, bindery operations, etc.

The School of Graphic Arts of the University was recently presented a $10,000 gift of two Intertype linecasting machines by Rhea Howard, President of the Times Publishing Co., Wichita Falls, Tex. The machines will augment the composing room, pressroom and bindery equipment already on hand at the school.

Louis H. Dobbs, Midwestern's Director of Graphic Arts, pointed out that in addition to the Graphic Arts proficiency diploma, the students who qualify for a Bachelor of Science degree in Education, may choose Graphic Arts as one of their majors. He added that this provision discharges an obligation to the teaching field in the training of teachers for schools desiring qualified people on secondary school faculties.

Tuition for all Graphic Arts courses is $75 per fall and spring semester. Additional information may be obtained by writing to J. H. Jameson, Registrar, or Mr. Dobbs, at Midwestern University.

Opens New Offices

Lynch Corporation, Anderson, Ind., recently opened sales offices and warehouses in New York, N. Y., and Atlanta, Ga. Similar facilities were completed in Chicago during the first part of March. Lynch manufactures glass forming and packaging machinery.

A Better Furnace . . . At a Better Price

The NOLAN METAL REMELTER

Saves Time
Saves Money
Saves Work

A compact, highly efficient metal remelting furnace. Priced surprisingly low and designed to make your remelting and repigging easier at money-saving speed. Available in models from 600-lb. capacity to 10-ton. Write for Bulletins.

NOLAN, CORP.
ROME, NEW YORK
Builders of Quality Printing Machinery

ELIMINATE HAND-PACKING! IMPROVE PRINTING QUALITY

by means of the

STEREOTEX
HYDRAULIC MATRIX PRESS
and
AUTOMATIC BACKING PAPER

PAYS FOR ITSELF IN SHORT TIME

Our Automatic Space Backing Paper is also suitable for roller-molding. Write for full particulars.

STEREOTEX MACHINERY CO. Westport, Conn.

CLASSIFIED ADVERTISING

ALL CLASSIFICATIONS

$.75 per line 1 9/16" wide. Minimum ad 5 lines, 29 characters per line. Cash with order.

CLOSING DATE—15th of Month preceding Date of Issue

We will forward all mail addressed to Box Numbers. When answering Box Numbered ads, address as follows: Box Number . . . PRINTING EQUIPMENT Engineer, 1276 West 3rd Street, Cleveland 13, Ohio.

FOR SALE

4/0 Miehle Press with Dexter Suction Pile Feeder and Miehle Extension Delivery, AC Motor equipment, rebuilt 1949. Benche Inc., P. O. Box 943, Schenectady, N. Y.

Completely Rebuilt

Two fan style Model 8's, all improvements. One single keyboard Model 14. One Ludlow machine. Priced for quick sale. Excellent machines. Write for details. American Printing Mchy. Co., Inc., 88 Gold St., N. Y. C.

SPECIALISTS

in Moving Printing Equipment

We specialize in dismantling, moving and erecting newspaper and commercial printing presses as well as printing equipment of all kinds. Experienced, trained personnel equipped with modern equipment moves one machine or a complete plant any distance required. All contracts are handled promptly and are fully covered by insurance.

The ALLMEN CO. 8416 LAKE AVE. CLEVELAND, O. • OLympic 1-2300

★ **STAR CUT CEMENT** ★

Since 1936 — *For Mounting* — Since 1936

CUTS. .STEREOTYPES...ELECTROTYPES

65c per tube-$5.50 per doz. $5.00 per doz. in two doz. lots, $4 50 per doz. in gross lots.

★ STAR CEMENT COMPANY ★
45 Malone Avenue, BELLEVILLE 9, N.J.

CLINE-WESTINGHOUSE
ELECTRICAL EQUIPMENT

Unit Press Drives . . . Reels . . . Automatic Tensions . . . Speed Pasters provide safety and reliability with economy. Whether large or small . . . letterpress or offset . . . your press-room can rely on Cline-Westinghouse Electrical Equipment.

CLINE ELECTRIC MFG. CO.
MAIN OFFICE: 3405 W. 47th St., Chicago 32
410 Bush St. San Francisco — 220 E. 42nd St. New York City

THE DOYLE INFRARED DRYER
Patented
for all types of printing machinery
THE DOYLE VACUUM SHEET CLEANER
Patented
Removes dirt, dust, lint and dry spray from paper while printing
The J. E. Doyle Co., 1220 West 6th St., Cleveland 13, Ohio

SPEEDAUMAT MAILER • Model MC for Newspapers
¼ page folder, AC motor—Prints 11000 addresses per hour
for Illustrations and Description write
JOHN GRIFFITHS CO., INC.
11 West 42nd St. New York 18

NEWSPAPER & PRINTING PLANT ENGINEERING

NEW BUILDINGS • MODERNIZATION
SURVEYS • CONSULTATION

ROBERT W. DICKERSON
2063 EAST 4TH STREET • CLEVELAND 15, OHIO

WEB DRYING APPARATUS
for ROTOGRAVURE • WEB-OFFSET • ANALINE LETTERPRESS
B. OFFEN & CO.
168 N. Michigan Ave. Chicago 1, Illinois

SpeedFlex — *THE FASTEST, MOST MODERN JOB PRESS!*

for mailing pieces, throw aways, inserts, and all types of form printing

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COUPON BRINGS DETAILS

A general sales meeting for all its representatives was held recently by Miehle Printing Press & Mfg. Co. at the home office in Chicago. The sales organization reviewed recent developments in Miehle the letterpress, offset, boxboard and gravure fields. Carlton Mellick Vice President, said this was the first general sales meeting held by Miehle in over three years. One of the more important points of discussion was the effect of the defense effort on both the Miehle Company and the printing industry. Miehle will soon start a series of press demonstrations throughout the country. Also, an evening school will be run for pressmen to assist them in pressroom problems.

President, John W. Key, Admiral Screen Print Corp., 627 W. Lake St., Chicago 6. Ill.

SNPA (Eastern Div.) Mechanical Conference — 1952 Conference, Andrew Jackson Hotel, Nashville, Tenn., August 25, 26, Chairman, W. D. (Red) Jacobs, Mobile (Ala.) *Press-Register;* Secretary, Ray B. Crow, Southern Newspaper Publishers Assoc., P. O. Box 1569, Chattanooga 1, Tenn.

SNPA (Western Div.) Mechanical Conference — Chairman, Ralph Moffett, Mechanical Supt., Dallas (Tex.) *Times-Herald;* Chairman of Supply Men's Committee, F. L. A. Gospach, Intertype Corporation.

Technical Assoc. of the Graphic Arts —1952 Meeting, Hotel Carter, Cleveland, May 5, 6 and 7. President, Paul W. Dorst, 3373 Morrison Ave., Cincinnati 20, Ohio; Secretary-Treasurer, Paul J. Hartsuch, Intl. Printing Ink Div. of Interchemical Corp., 161 W. Harrison St., Chicago 5.

Typographic Composition

(Continued from Page 34)

This eliminates unnecessary footwork in shifting the financial pages to and fro between makeup table and proof press, and insures accuracy. In financial composition, first consideration should be given to elimination of hazards because this type of composition is costlier.

Reproduction proofs are taken in the plant of Dayton Typographic Service by a specialist on Vandercook proof presses. These presses are used for no other purpose. Reproduction proofing requirements make it imperative that they have that ultra-ultra appearance. They must pass the platemaker's inspection and should be of such quality that the camera will not accentuate the slightest defect.

Among the midwestern printers who recently visited Harris-Seybold's St. Louis office to view the new Harris 21in. by 28 in. offset press. Left to right in the illustration are T. G. Rainey, A. B. Mueller, Carlyle Wilson and Raymond Bonifer, all of the Koelle Mueller Label Co., St. Louis. Demonstrating the press is Ralph Pufahl (right) of Harris-Seybold. Koelle Mueller recently installed its first offset press, a Harris Single Color 22 in. by 34 in. machine.

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March 1952

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2. New Counterbalance facilitates timing of distributor screws on Intertype mixers.

3. New First Elevator Alignment Lever aids in setting intricate composition, especially where the body sizes and alignment positions change frequently.

4. New Forked Lever, with built-in self-aligning brake shoe, insures instant, automatic stops in any position of the cam shaft.

5. Improved Mouthpiece Shield for electric pot maintains clean lock-up conditions and minimizes down time.

6. New Knife Wiper removes metal chips more efficiently than ever before.

7. Improved First Elevator Lever Link Spring provides uniform compression in all three alignment positions and reduces wear on matrices.

8. New Left-hand Trimming Knife, held by a solid truss to increase rigidity, makes possible a much greater degree of accuracy in trimming slugs.

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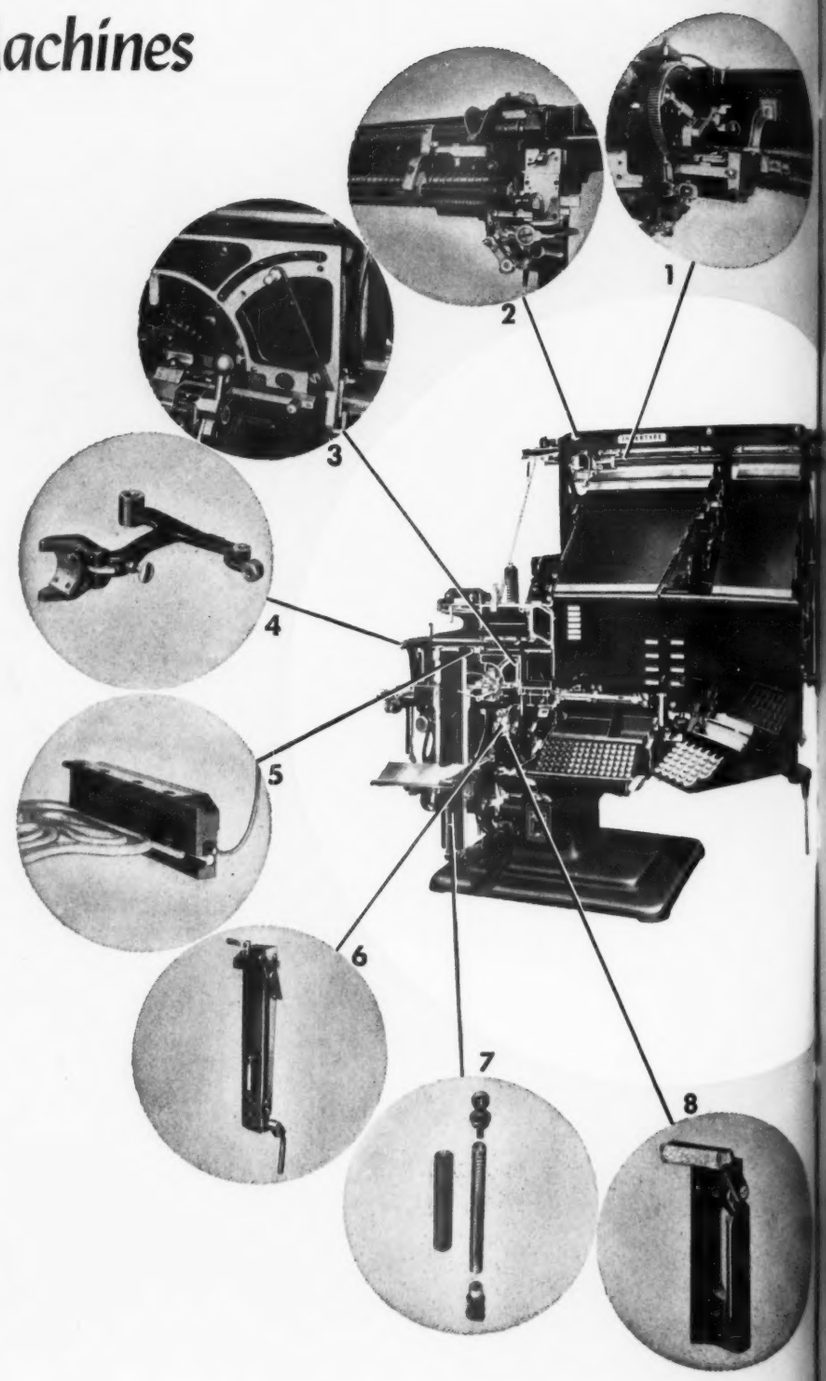

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